County of San Diego
Health and Human Services Agency
Emergency Medical Services

San Diego County Trauma System Report

2010

September, 2012

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The San Diego County Trauma System emerged as a result of dedicated physicians, nurses, and system specialists within the county working to develop an environment for the careful evolution of a regional trauma system. The input from these groups generated the discussion and in-depth analysis of relevant public health policy options.

In 1982, the Hospital Council (now the Healthcare Association) of San Diego and Imperial Counties conducted a needs assessment to determine if San Diego County would benefit from a regionalized trauma system. The study represented the first comprehensive concurrent and retrospective audit of trauma care in the nation ("Trauma Needs Assessment Study" by Amherst and Associates). The findings and recommendations of the Trauma Needs Assessment Study, released in November of 1982, led to the development of a joint Hospital Council and Medical Society plan for care of major trauma victims in San Diego County.

In October 1983, with support and direction from the San Diego County Board of Supervisors, the Department of Health Services created an Ad Hoc Trauma Advisory Task Force to assist in the review and evaluation of the Hospital Council – Medical Society Trauma Plan. The advisory group of outside trauma experts conducted public hearings and informal sessions with in-hospital and prehospital trauma care providers, and synthesized the experiences of other trauma systems into a single set of recommendations for the Department and the Board of Supervisors to consider. The recommendations urged the county to adopt trauma standards that closely approximated the American College of Surgeons guidelines. The community consensus that emerged from their effort resulted in the formal adoption of their recommendations by the County Board of Supervisors in November 1983.

Once the trauma standards were adopted, the Department implemented a competitive selection process, seeking to designate five adult trauma centers and one pediatric trauma center. Designation criteria were incorporated in a Request for Proposal and the Ad Hoc Trauma Advisory Task Force became the Proposal Review Committee to evaluate and recommend hospitals for designation. Six facilities were awarded provisional designation status based on the quality of trauma services provided.

On August 1, 1984, after sixteen months of direct preparation, major trauma victims in San Diego County began bypassing community hospitals in favor of designated trauma centers.

Since it inception, the San Diego County Trauma System has responded to nearly 200,000 patients in need of trauma care, and saved untold numbers of lives.

The six trauma centers currently designated are:

Children's Hospital and Health Center
Scripps Mercy Hospital
Palomar Medical Center
Scripps Memorial Hospital – La Jolla
Sharp Memorial Hospital
U.C.S.D. Medical Center

Introduction

Currently, there are five adult trauma centers serving San Diego County: Palomar Medical Center, Scripps Memorial Hospital - La Jolla, Scripps Mercy Hospital, Sharp Memorial Hospital, and UCSD Medical Center. Rady Children's Hospital serves as the pediatric trauma center. Since August 1984, more than 200,000 trauma patients have been admitted to San Diego County's designated trauma centers.

Traumatic injury, considered a preventable disease, represents a serious public health challenge for San Diego County. During 2010, 10,417 patients were evaluated at designated trauma centers (an average of 868 patients per month). In 2010, the number of trauma patients decreased from 2009 by three percent. The overall number of trauma patients has increased over the last decade. However, this is simply a reflection of the increasing population in San Diego County, as revealed by the stable trauma patient rates.

Table 1.1: Trauma Center Admissions by Year: 2000 - 2010

	Trauma Center Admissions			
Year	Number	Monthly Average	% Change from Previous Year	Rate per 100,000 Population
2000	9,354	780		332.43
2001	9,285	774	-1%	325.11
2002	9,986	832	8%	343.34
2003	9,940	828	0%	335.63
2004	10,379	865	4%	343.99
2005	9,839	820	-5%	322.45
2006	9,960	830	1%	324.77
2007	10,809	901	9%	348.87
2008	10,919	910	1%	347.05
2009	10,771	898	-1%	339.41
2010	10,417	868	-3%	323.87

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Center Monthly Reports(2000 – 2002) and San Diego County Trauma Registry (2003 – 2010); Population Estimates, SANDAG.

Traumatic injuries are classified as either penetrating or blunt. The number of patients admitted to county trauma facilities with penetrating injuries (mostly due to firearms and cutting/piercing injuries) increased from the year 2000 to 2005. Since then, the number of penetrating injuries decreased 22% to 758 in 2010. The number of blunt injuries, primarily resulting from motor vehicle related injuries and falls, has been relatively stable, increasing by about one percent per year. Blunt force injuries made up over 90% of all injuries.

Table 1.2: Trauma Center Admissions by Injury Type: 2000 - 2010

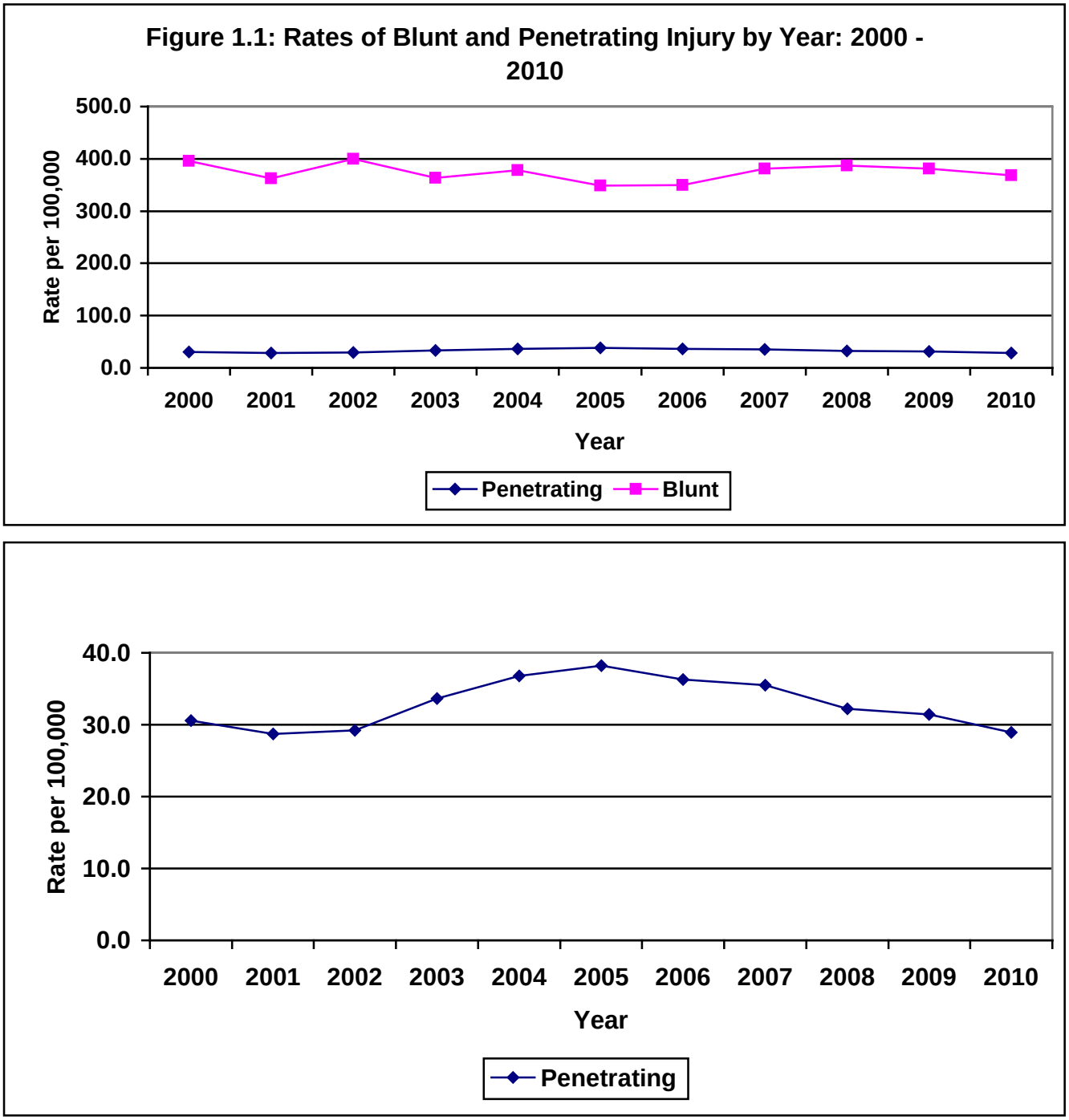
	Penetrating				Blunt			
Year	#	%	% Change from Previous Year	Rate per 100,000 Population	#	%	% Change from Previous Year	Rate per 100,000 Population
2000	663	7%	---	30.55	8,588	93%	---	395.77
2001	645	7%	-3%	28.69	8,143	93%	-5%	362.16
2002	680	7%	5%	29.21	9,305	93%	14%	399.64
2003	813	8%	20%	33.63	8,777	92%	-6%	363.04
2004	919	9%	13%	36.79	9,437	91%	8%	377.78
2005	967	10%	5%	38.22	8,830	90%	-6%	349.04
2006	934	9%	-3%	36.31	9,007	91%	2%	350.13
2007	921	9%	-1%	35.50	9,880	91%	10%	380.86
2008	839	8%	-9%	32.21	10,080	92%	2%	387.04
2009	821	8%	-2%	31.42	9,949	92%	-1%	380.74
2010	758	7%	-8%	28.92	9,654	93%	-3%	368.32

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Center Monthly Reports (2000 – 2002) and San Diego County Trauma Registry (2003 – 2010); Population Estimates, SANDAG.

A rate is calculated as incidence per 100,000 population. Rates were calculated using population estimates obtained from the San Diego Association of Governments (SANDAG). Rates were not calculated for categories with fewer than five occurrences.

$$\text{Rate} = \frac{\text{Incidence X } 100{,}000}{\text{Population}}$$

Figure 1.1 shows the trends for blunt and penetrating trauma activations from 2000 through 2010. The population-based rates have stayed fairly steady over this time period



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Center Monthly Reports (2000 – 2002) and San Diego County Trauma Registry (2003 – 2010); Population Estimates, SANDAG.

Trauma Registry Data

The American College of Surgeons Committee on Trauma initiated the Major Trauma Outcome Study (MTOS) in 1982, which pooled data from more than 100 trauma centers nationwide. To be included, trauma patients had to meet specific criteria which reflect either the severity of the patient's injuries or the resources required to care for the patient.

Members of the San Diego County trauma system modified these criteria for the San Diego County Trauma Registry. Through 1999, a trauma patient must have met one of the following criteria for entry in the trauma registry: admission to the hospital for at least three days, admission to an intensive or intermediate care unit, interfacility transfer to or from an acute care hospital, or death from traumatic injuries. In January 2000, these criteria were revised to include trauma patients who had been admitted for at least 24 hours, although admission to an ICU was no longer a criterion for inclusion. Starting in 2003, the trauma registry included all patients evaluated by a trauma surgeon, but maintained the modified MTOS criteria to identify "major" trauma patients.

Of the 10,417 patients who were admitted to a trauma center during 2010, 6,587 (63%) met modified MTOS criteria. Total trauma admissions decreased by 3% from the previous year, while the number of modified MTOS patients decreased by 4%.

Table 1.3: Total MTOS Patients and Trauma Center Admissions: 2000 - 2010

Year	Total Trauma Admissions	% Change from Previous Year	Modified MTOS Patients	% Change from Previous Year	MTOS Percent of Total
2000	9,354	---	5,128	---	55%
2001	9,285	-1%	5,013	-2%	54%
2002	9,986	8%	5,726	14%	57%
2003	9,940	0%	5,813	2%	58%
2004	10,379	4%	6,143	6%	59%
2005	9,839	-5%	6,168	0%	63%
2006	9,960	1%	6,310	2%	63%
2007	10,809	9%	6,813	8%	63%
2008	10,919	1%	6,907	1%	63%
2009	10,771	-1%	6,861	-1%	64%
2010	10,417	-3%	6,587	-4%	63%
Total	**111,659**	**---**	**67,469**	**---**	**60%**

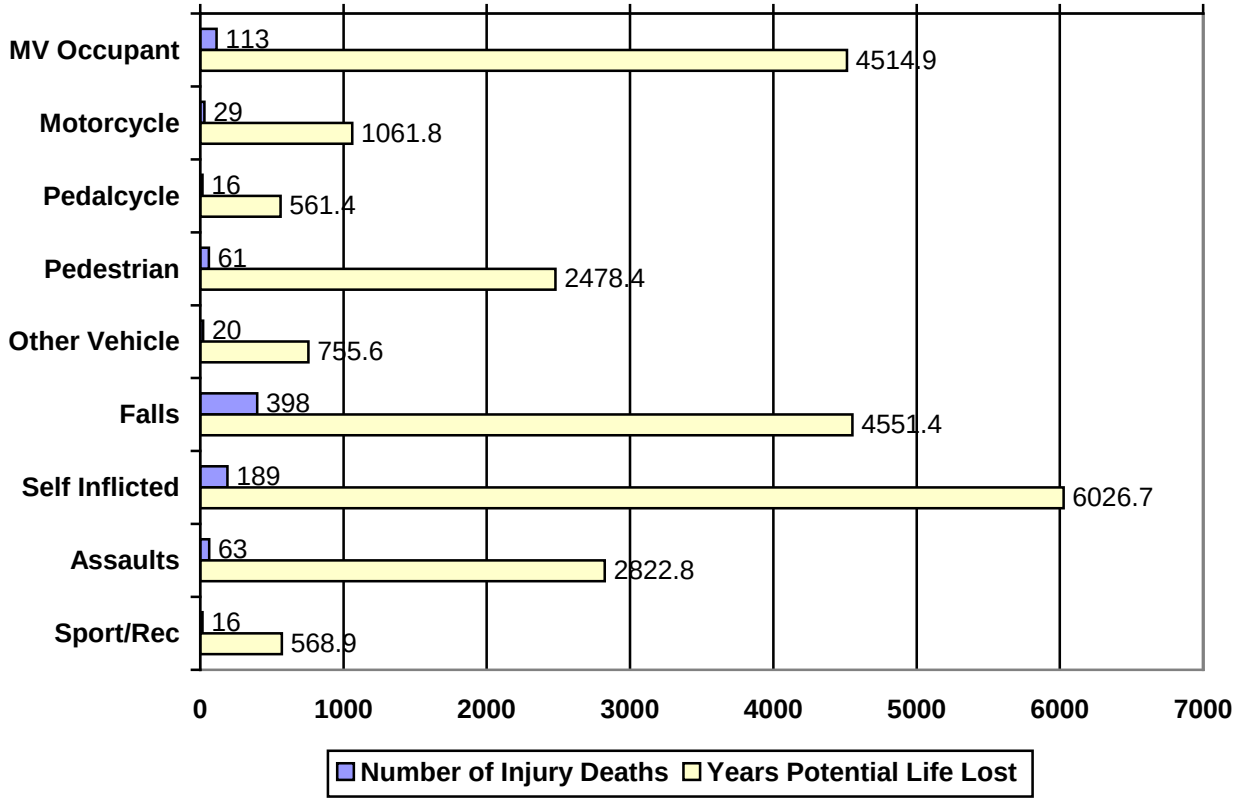
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Trauma Center Monthly Reports, 2000 - 2010.

Years of Potential Life Lost (YPLL) calculates the years of life lost due to a death using the average life expectancy as an estimate for the total length of life. Life expectancy was derived from the Vital Statistics Life Tables (Centers for Disease Control and Prevention). For age groups, YPLL was calculated using the life expectancy for the median age for the group.

YPLL = (Expected years of life - median age) X Number of deaths

Among traumatic deaths, falls were the leading cause of death (398). Suicide had less than half the number of deaths as falls, but the total years of potential life lost was 32% higher (6,027 vs. 4,551). This is because individuals who die from falls tend to be much older than those who die from other causes.

Figure 1.2: Cause of Death and Years Potential Life Lost: 2010

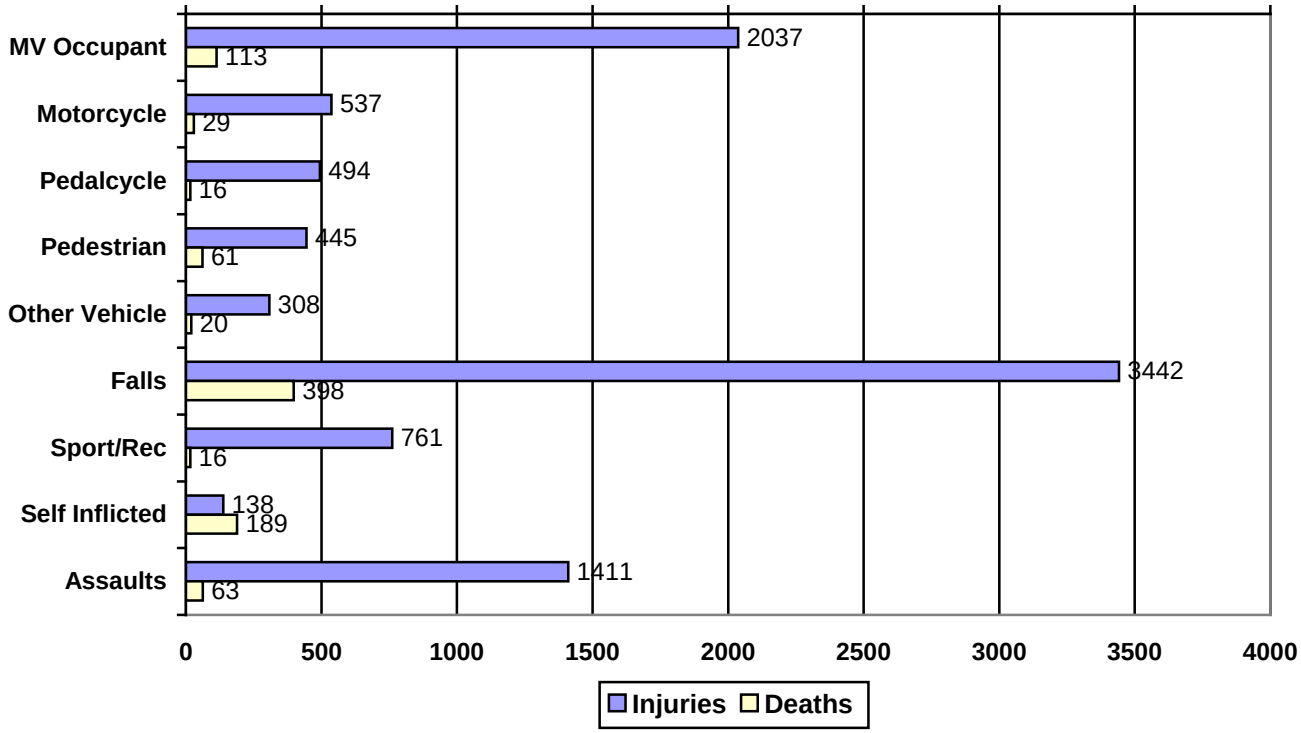


*Age was unknown for one pedestrian death – not included in YPLL calculation.
Source: County of San Diego Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Life Table data obtained from Arias E. United States life tables, 2003. National vital statistics reports; vol 54 no 14. Hyattsville, MD: National Center for Health Statistics. 2006.

Current Overview of Traumatic Injury in San Diego County

During 2010, 949 lives were lost in San Diego County due to traumatic injury. On the average, for every person who died as the result of a traumatic injury, ten more were seriously injured. Figure 1.3 breaks out deaths and injuries by mechanism. The three leading causes of traumatic injury were falls, motor vehicle occupant crashes, and assaults. The leading causes of traumatic death were falls, suicide, and motor vehicle occupant crashes.

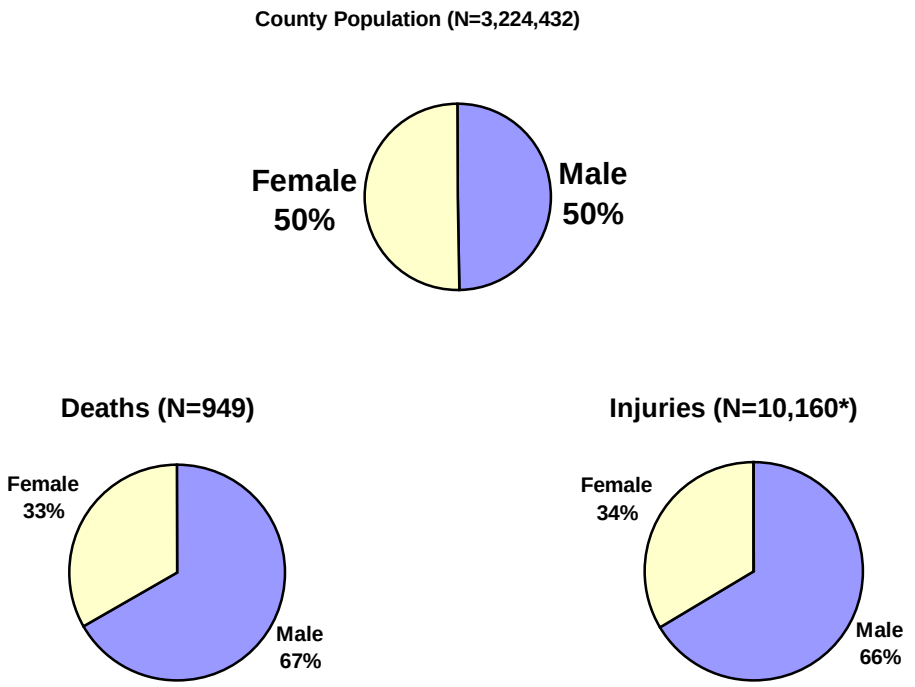
Figure 1.3: Overall Trauma System Injuries and Deaths by Mechanism: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Although males made up half the county's population, they accounted for 66% of all serious injuries and 67% of deaths from trauma in 2010.

Figure 1.4: Comparison of County Population to Deaths and Injuries by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG, January 1, 2010.
*Total number of injuries includes six patients with unspecified gender.

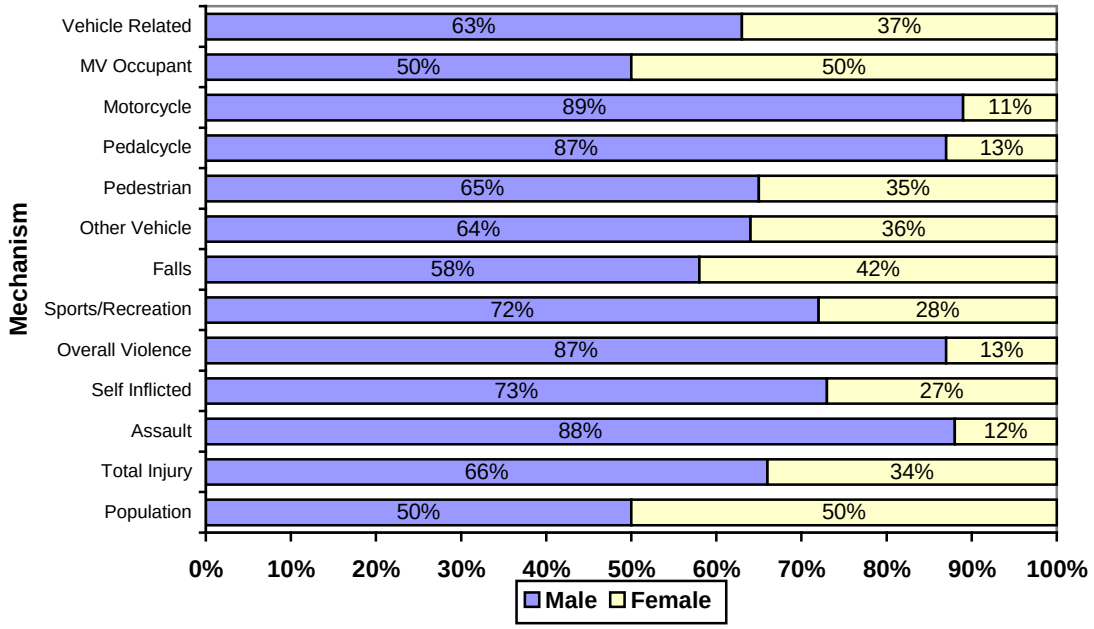
Patterns of injury were suggested by gender. Males accounted for 66% of all nonfatal injuries, and were especially highly represented in assaults (88%), motorcycle crashes (89%), and pedalcycle crashes (87%). Falls and assaults were the leading causes of injury for males, while falls and motor vehicle occupant crashes were the leading causes of injury for females.

Table 1.4: Trauma System Non-Fatal Injury by Mechanism and Gender: 2010

	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Vehicle Related	**2,411**	**36%**	**1,408**	**41%**	**3,821**	**38%**
MV Occupant	*1,018*	*15%*	*1,018*	*30%*	*2,037*	*20%*
Motorcycle	*477*	*7%*	*60*	*2%*	*537*	*5%*
Pedalcycle	*429*	*6%*	*65*	*2%*	*494*	*5%*
Pedestrian	*290*	*4%*	*154*	*5%*	*445*	*4%*
Other Vehicle	*197*	*3%*	*111*	*3%*	*308*	*3%*
Falls	**1,987**	**29%**	**1,454**	**43%**	**3,442**	**34%**
Sports/Recreation	**550**	**8%**	**210**	**6%**	**761**	**7%**
Overall Violence	**1,344**	**20%**	**203**	**6%**	**1,549**	**15%**
Self Inflicted	*101*	*1%*	*37*	*1%*	*138*	*1%*
Assault	*1,243*	*18%*	*166*	*5%*	*1,411*	*14%*
Other	**436**	**6%**	**131**	**4%**	**567**	**6%**
Unknown	**16**	**0%**	**4**	**0%**	**20**	**0%**
Total	**6,744**	**100%**	**3,410**	**100%**	**10,160**	**100%**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.
Note: total include patients with unspecified gender.

Figure 1.5: Percent of Gender by Injury Mechanism: Non-Fatal Injuries: 2010



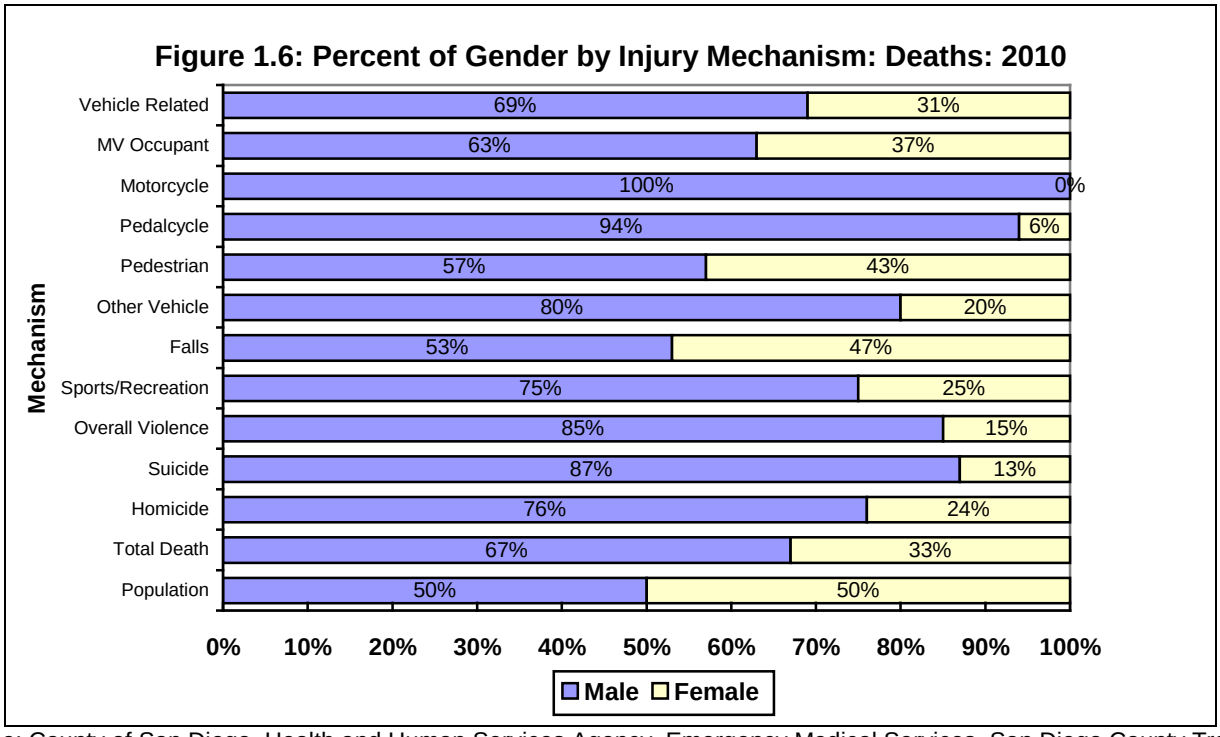
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Males also made up the majority of traumatic deaths for all causes of injury. Falls were the leading cause of traumatic death for both men and women.

Table 1.5: Trauma System Deaths by Mechanism and Gender: 2010

	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Vehicle Related	**166**	**26%**	**73**	**23%**	**239**	**25%**
MV Occupant	*71*	*11%*	*42*	*13%*	*113*	*12%*
Motorcycle	*29*	*5%*	*0*	*0%*	*29*	*3%*
Pedalcycle	*15*	*2%*	*1*	*0%*	*16*	*2%*
Pedestrian	*35*	*6%*	*26*	*8%*	*61*	*6%*
Other Vehicle	*16*	*3%*	*4*	*1%*	*20*	*2%*
Falls	**212**	**33%**	**186**	**59%**	**398**	**42%**
Sports/Recreation	**12**	**2%**	**4**	**1%**	**16**	**2%**
Overall Violence	**213**	**34%**	**39**	**12%**	**252**	**27%**
Self Inflicted	*165*	*26%*	*24*	*8%*	*189*	*20%*
Assault	*48*	*8%*	*15*	*5%*	*63*	*7%*
Other	**29**	**5%**	**13**	**4%**	**42**	**4%**
Unknown	**1**	**0%**	**1**	**0%**	**2**	**0%**
Total	**633**	**100%**	**316**	**100%**	**949**	**100%**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Table 1.6 describes both the mean and median ages[1] by mechanism of injury for both injuries and deaths. As this table shows, different mechanisms have distinct age distributions. Injuries due to sports and recreational activities occurred among the youngest patients (median=21, mean=27 years), while fall injuries occurred among older patients (median=62, mean=57). Half of all those who died from falls were older than 84 years. For all mechanisms of injury, patients who died were older, on average, than those who survived.

Table 1.6: Mean and Median Age by Mechanism of Injury and Outcome: 2010

	Survived			Expired		
	Count	Median Age	Mean Age	Count	Median Age	Mean Age
Vehicle Related	**3,821**	**33**	**38**	**239**	**42**	**44**
MV Occupant	*2,037*	*33*	*38*	*113*	*37*	*44*
Motorcycle	*537*	*34*	*37*	*29*	*50*	*46*
Pedalcycle	*494*	*36*	*36*	*16*	*50*	*48*
Pedestrian	*445*	*30*	*36*	*61*	*42*	*43*
Other Vehicle	*308*	*37*	*39*	*20*	*47*	*43*
Falls	**3,442**	**62**	**57**	**398**	**84**	**80**
Sport/Rec	**761**	**21**	**27**	**16**	**51**	**48**
Overall Violence	**1,549**	**28**	**32**	**252**	**51**	**49**
Self Inflicted/Suicide	*138*	*36*	*38*	*189*	*54*	*53*
Assault/Homicide	*1,411*	*27*	*31*	*63*	*31*	*38*
Other	**567**	**37**	**38**	**42**	**59**	**60**
Unknown	**20**	**36**	**33**	**2**	**52**	**52**
Total	**10,160**	**39**	**42**	**949**	**64**	**61**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

[1] The mean is the average age. The median is the middle age when all of the ages are put into numerical order. In the event of an abnormally high or low age (an outlier), the median age is not as likely to be influenced as the mean age.

Adults aged 75 years and older made up 6% of the county population in 2010, but accounted for nearly 15% of all trauma patients and 36% of fall-related injuries. Younger adults between 20 and 44 years of age are still the major contributors to non-fall related injuries, representing 62% of all traumatic motorcycle injuries, 60% of all self-inflicted, and 64% of all assault injuries.

For a list of the leading causes of severe injury and death by age group, see appendix A. For a list of county population by age group, see appendix C.

Table 1.7: Trauma System Injuries by Mechanism and Age Group in Years: 2010

	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unkn	Total
Vehicle Related	**79**	**103**	**134**	**361**	**584**	**705**	**485**	**565**	**393**	**222**	**128**	**62**	**0**	**3,821**
MV Occupant	*40*	*53*	*43*	*188*	*347*	*387*	*252*	*265*	*200*	*140*	*76*	*46*	*0*	*2,037*
Motorcycle	*0*	*1*	*3*	*25*	*109*	*133*	*90*	*103*	*52*	*15*	*4*	*2*	*0*	*537*
Pedalcycle	*9*	*20*	*51*	*63*	*39*	*61*	*61*	*95*	*64*	*17*	*11*	*3*	*0*	*494*
Pedestrian	*17*	*25*	*30*	*60*	*48*	*67*	*34*	*62*	*50*	*29*	*18*	*5*	*0*	*445*
Other Vehicle	*13*	*4*	*7*	*25*	*41*	*57*	*48*	*40*	*27*	*21*	*19*	*6*	*0*	*308*
Falls	**266**	**73**	**52**	**91**	**129**	**202**	**235**	**370**	**416**	**387**	**620**	**601**	**0**	**3,442**
Sports/Recreation	**14**	**36**	**129**	**182**	**87**	**82**	**90**	**81**	**40**	**15**	**5**	**0**	**0**	**761**
Overall Violence	**34**	**8**	**10**	**225**	**340**	**383**	**256**	**182**	**77**	**19**	**8**	**7**	**0**	**1,549**
Self Inflicted	*0*	*1*	*0*	*10*	*20*	*37*	*26*	*22*	*14*	*4*	*2*	*2*	*0*	*138*
Assault	*34*	*7*	*10*	*215*	*320*	*346*	*230*	*160*	*63*	*15*	*6*	*5*	*0*	*1,411*
Other	**38**	**25**	**44**	**34**	**41**	**87**	**71**	**103**	**59**	**19**	**28**	**18**	**0**	**567**
Unknown	**4**	**0**	**0**	**1**	**4**	**0**	**5**	**3**	**2**	**1**	**0**	**0**	**0**	**20**
Total	**435**	**245**	**369**	**894**	**1,185**	**1,459**	**1,142**	**1,304**	**987**	**663**	**789**	**688**	**0**	**10,160**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Adults aged 85 years and older made up nearly one-fourth (23%) of all traumatic deaths. Eighty five percent of these were due to falls. Non-fall related deaths impacted younger ages; 15 to 24 year olds made up 28% of motor vehicle occupant deaths and 28% of deaths from homicide.

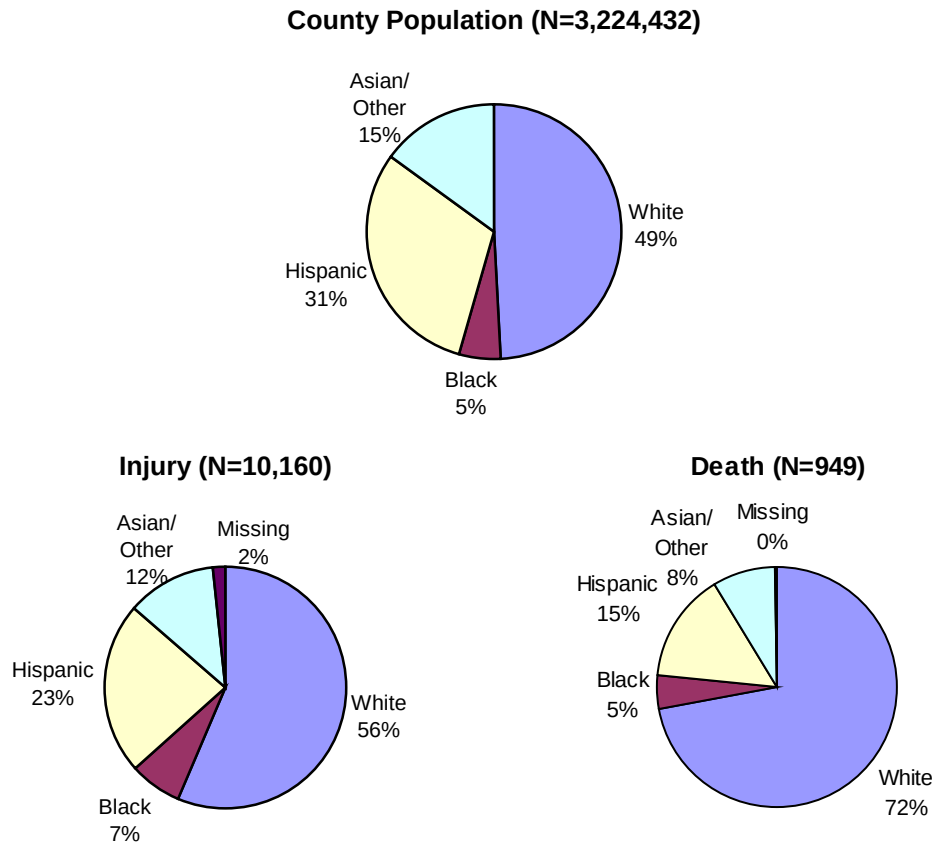
Table 1.8: Trauma System Deaths by Mechanism and Age Group in Years: 2010

	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unkn	Total
Vehicle Related	**5**	**5**	**1**	**18**	**29**	**32**	**34**	**44**	**27**	**15**	**15**	**12**	**2**	**239**
MV Occupant	*2*	*3*	*1*	*12*	*20*	*15*	*10*	*14*	*7*	*6*	*11*	*11*	*1*	*113*
Motorcycle	*0*	*0*	*0*	*0*	*0*	*5*	*7*	*11*	*5*	*1*	*0*	*0*	*0*	*29*
Pedalcycle	*0*	*0*	*0*	*1*	*1*	*1*	*3*	*4*	*4*	*2*	*0*	*0*	*0*	*16*
Pedestrian	*3*	*1*	*0*	*3*	*6*	*10*	*11*	*10*	*8*	*5*	*3*	*1*	*0*	*61*
Other Vehicle	*0*	*1*	*0*	*2*	*2*	*1*	*3*	*5*	*3*	*1*	*1*	*0*	*1*	*20*
Falls	**0**	**0**	**0**	**1**	**0**	**2**	**3**	**17**	**34**	**49**	**104**	**188**	**0**	**398**
Sports/Recreation	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**5**	**3**	**3**	**0**	**0**	**0**	**16**
Overall Violence	**1**	**0**	**3**	**15**	**28**	**31**	**23**	**48**	**46**	**25**	**17**	**15**	**0**	**252**
Self Inflicted	*0*	*0*	*2*	*6*	*19*	*18*	*15*	*38*	*40*	*20*	*16*	*15*	*0*	*189*
Assault	*1*	*0*	*1*	*9*	*9*	*13*	*8*	*10*	*6*	*5*	*1*	*0*	*0*	*63*
Other	**2**	**0**	**0**	**0**	**1**	**3**	**2**	**5**	**12**	**4**	**7**	**6**	**0**	**42**
Unknown	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**2**
Total	**8**	**5**	**5**	**35**	**59**	**69**	**63**	**120**	**123**	**96**	**143**	**221**	**2**	**949**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

The relative distribution of traumatic injuries and deaths by race/ethnicity was more highly represented by whites than would have been predicted by the population distribution.

Figure 1.7: Comparison of County Population to Injuries and Deaths By Race/Ethnicity: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG, updated August 2010.

Whites made up 49% of the overall county population, but made up a larger proportion of injuries and deaths from motorcycle crashes (67% of injuries, 86% of deaths), falls (66% of injuries, 82% of deaths), and pedalcycle crashes (64% of injuries, 63% of deaths). Blacks, with 5% of the total population, were more severely impacted by assaults (15% of injuries, 21% of deaths).

Table 1.9: Trauma System Injuries by Mechanism and Race/Ethnicity: 2010

	White	Black	Hispanic	Asian/Other	Missing	Total
Vehicle Related	**2,021**	**253**	**986**	**497**	**64**	**3,821**
MV Occupant	*959*	*154*	*602*	*289*	*33*	*2,037*
Motorcycle	*362*	*33*	*90*	*45*	*7*	*537*
Pedalcycle	*317*	*16*	*91*	*62*	*8*	*494*
Pedestrian	*204*	*33*	*140*	*59*	*9*	*445*
Other Vehicle	*179*	*17*	*63*	*42*	*7*	*308*
Falls	**2,268**	**153**	**626**	**352**	**43**	**3,442**
Sports/Recreation	**517**	**13**	**136**	**77**	**18**	**761**
Overall Violence	**610**	**228**	**487**	**185**	**39**	**1,549**
Self Inflicted	*80*	*11*	*30*	*15*	*2*	*138*
Assault	*530*	*217*	*457*	*170*	*37*	*1,411*
Other	**309**	**35**	**119**	**90**	**14**	**567**
Unknown	**13**	**1**	**5**	**1**	**0**	**20**
Total	**5,738**	**683**	**2,359**	**1,202**	**178**	**10,160**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

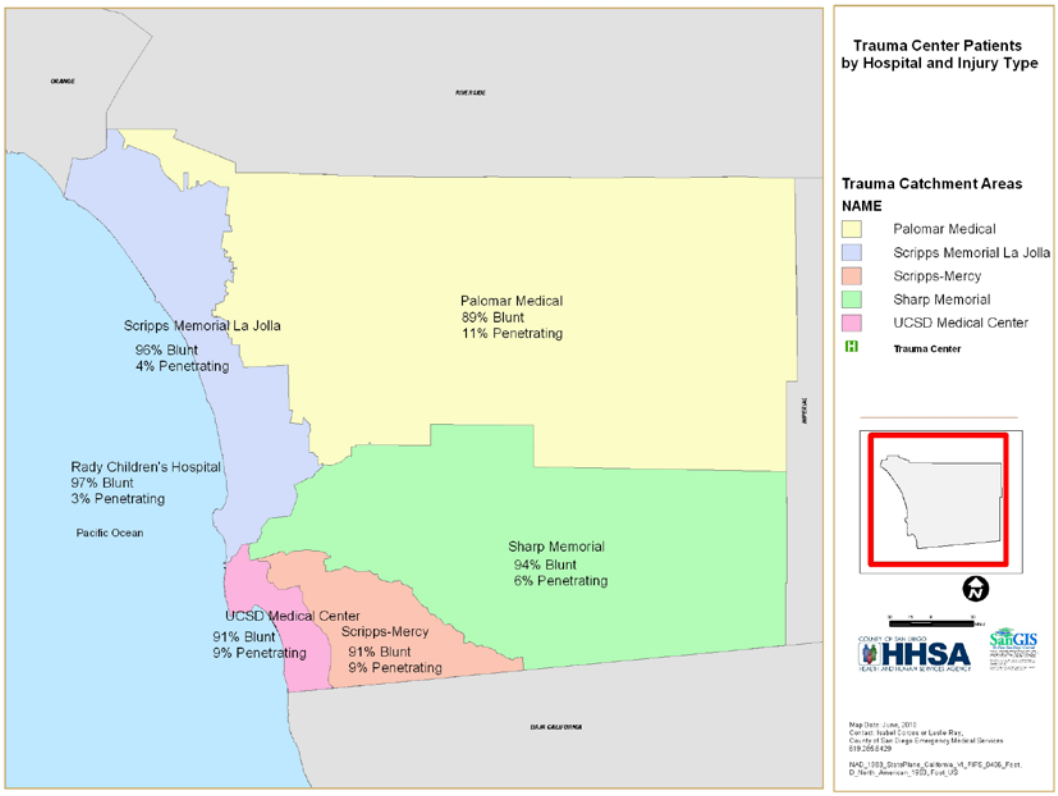
Table 1.10: Trauma System Deaths by Mechanism and Race/Ethnicity: 2010

	White	Black	Hispanic	Asian/Other	Missing	Total
Vehicle Related	**145**	**16**	**61**	**17**	**0**	**239**
MV Occupant	*63*	*7*	*36*	*7*	*0*	*113*
Motorcycle	*25*	*0*	*1*	*3*	*0*	*29*
Pedalcycle	*10*	*0*	*4*	*2*	*0*	*16*
Pedestrian	*31*	*9*	*16*	*5*	*0*	*61*
Other Vehicle	*16*	*0*	*4*	*0*	*0*	*20*
Falls	**327**	**10**	**28**	**33**	**0**	**398**
Sports/Recreation	**14**	**0**	**1**	**1**	**0**	**16**
Overall Violence	**171**	**17**	**37**	**26**	**1**	**252**
Suicide	*152*	*4*	*17*	*16*	*0*	*189*
Homicide	*19*	*13*	*20*	*10*	*1*	*63*
Other	**24**	**2**	**12**	**3**	**1**	**42**
Unknown	**2**	**0**	**0**	**0**	**0**	**2**
Total	**683**	**45**	**139**	**80**	**2**	**949**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Among patients seen at trauma facilities in San Diego County, 93% of injuries were blunt in nature (e.g., motor vehicle related, falls, or assaults with a blunt object). Ninety-seven percent of Children's Hospital and Health Center's trauma patients sustained blunt injuries. Palomar Medical Center, Scripps Mercy Hospital, and UCSD Medical Center received the highest percentages of penetrating injuries among each facility's trauma patients (11% of trauma patients at Palomar and 9% at UCSD and Scripps Mercy). Penetrating injuries include stabs and gunshot wounds primarily, so tend to indicate the proportion of injuries due to violence.

Figure 1.8: Distribution of Trauma Center Patients by Hospital and Injury Type: 2010



Source: San Diego County Trauma Center Monthly Reports, 2010.

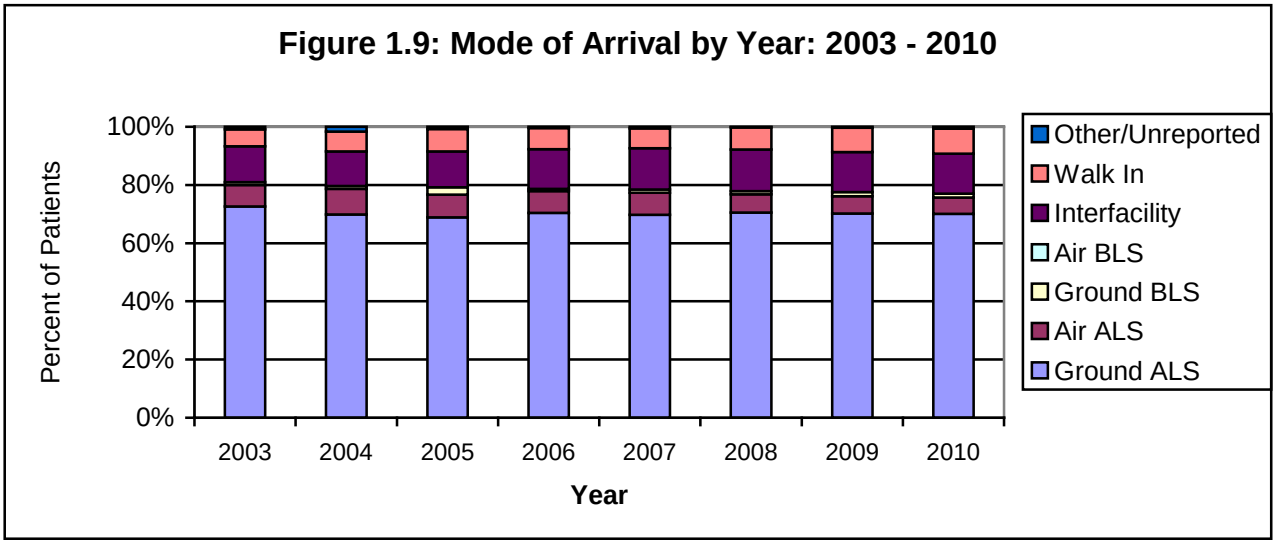
Trauma System Resources

During 2010, San Diego County had 18 civilian and two military emergency departments. The 18 civilian hospitals included seven base hospitals, five adult trauma centers, and one pediatric trauma center. The prehospital setting consisted of 21 ground transport agencies equipped to deliver advanced life support (ALS) services, one air transport agency, and 33 basic life support (BLS) agencies. Seventy percent of trauma patients were reported to have been transported to trauma centers by ground ALS ambulance units.

Table 1.11: Trauma Patient Mode of Arrival: 2003 - 2010

Transport Mode	2003	2004	2005	2006	2007	2008	2009	2010
Ground ALS	6,960	7,244	6,757	6,991	7,551	7,707	7,574	7,288
Air ALS	707	915	759	733	827	676	638	580
Ground BLS	89	107	254	83	116	128	156	140
Air BLS	1	2	0	0	0	1	1	1
Interfacility	1,182	1,227	1,206	1,346	1,531	1,553	1,486	1,433
Walk In	561	709	762	720	748	831	905	892
Other/Unreported	82	173	71	49	54	27	30	65
Total	**9,582**	**10,377**	**9,809**	**9,922**	**10,827**	**10,923**	**10,790**	**10,399**

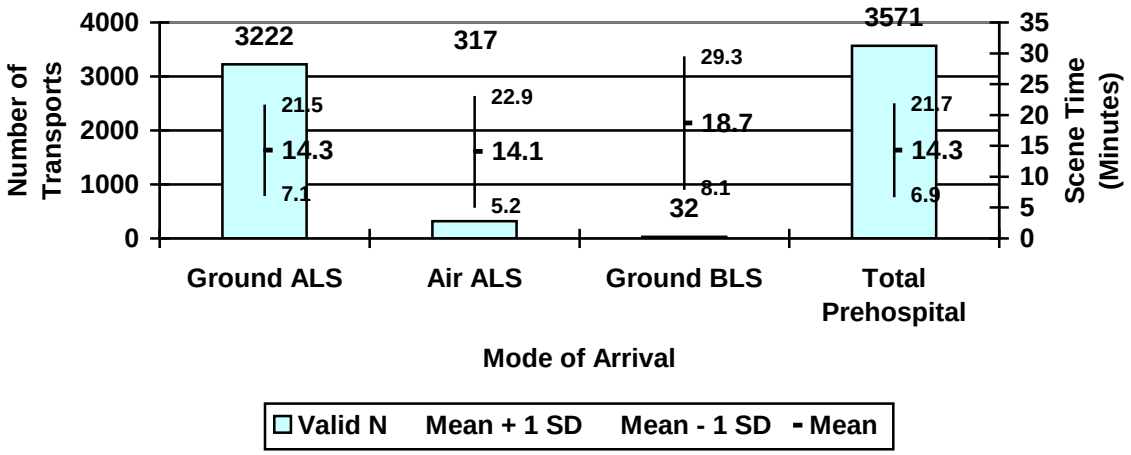
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2003 - 2010.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2003 - 2010.

Scene time is the length of time that the prehospital agency is on the scene, meaning the length of time from arrival on the scene until they are en route to the hospital. The mean *scene time* spent by prehospital personnel was 14.3 minutes during 2010, and ranged from 14 minutes for Air and Ground Advanced Life Support (ALS) to 18.7 minutes for ground BLS ambulance units. Prolonged *scene times* can be attributed to the type of call, complicated extrication procedures, road conditions, and difficulty accessing patients.

Figure 1.10: Scene Time by Mode of Arrival, 2010



Source: County of San Diego HHSA, Emergency Medical Services, San Diego County Trauma Registry, 2010.
Note: scene transport time was documented in 45% of prehospital-transported trauma patients.

Trauma Patient Outcomes

Please note that the following section only includes patients who were admitted to designated trauma centers and does not include patients who died at a non-trauma center or on scene. Of the trauma patients who were admitted to designated trauma centers in 2010, 98% survived to discharge.

The severity of a trauma patient's injuries is given by the Injury Severity Score (ISS), which is a measure of the three most severely injured body regions, and increases in relation to the severity of the injuries. Trauma patients with an ISS of less than 9 have a 99.8% survival rate in San Diego County. As shown in the table below, as a patient's ISS increases to 15 or more, the survival rate from injuries decreases to 90%. One of the most important achievements of the San Diego County Trauma System has occurred over the last 10 years in those with an ISS of 15 or greater, as the survival rate of this group increased from 80.5% in 2000 to 90.2% in 2010.

Table 1.12: Trauma Patient Outcomes by Injury Severity Score: 2000 - 2010

Year	Injury Severity Score											
	<9				9-14				15+			
	Survived (%)		Expired (%)		Survived (%)		Expired (%)		Survived (%)		Expired (%)	
2000	3678	(99.5%)	18	(0.5%)	1776	(99.1%)	17	(0.9%)	1026	(80.5%)	249	(19.5%)
2001	3420	(99.7%)	11	(0.3%)	1672	(99.2%)	14	(0.8%)	1041	(83.1%)	212	(16.9%)
2002	3902	(99.5%)	18	(0.5%)	1919	(99.4%)	12	(0.6%)	1257	(83.2%)	254	(16.8%)
2003	5709	(99.8%)	13	(0.2%)	2163	(99.0%)	22	(1.0%)	1354	(82.8%)	282	(17.2%)
2004	6185	(99.8%)	13	(0.2%)	2357	(99.2%)	20	(0.8%)	1453	(84.3%)	271	(15.7%)
2005	5550	(99.8%)	9	(0.2%)	2372	(99.5%)	13	(0.5%)	1526	(84.0%)	291	(16.0%)
2006	5665	(99.8%)	14	(0.2%)	2318	(99.4%)	13	(0.6%)	1638	(86.9%)	247	(13.1%)
2007	6237	(99.8%)	15	(0.2%)	2433	(99.1%)	22	(0.9%)	1831	(86.9%)	277	(13.1%)
2008	6167	(99.7%)	20	(0.3%)	2490	(99.4%)	16	(0.6%)	1932	(88.6%)	248	(11.4%)
2009	5989	(99.6%)	22	(0.4%)	2506	(99.3%)	18	(0.7%)	1852	(87.5%)	265	(12.5%)
2010	5849	(99.8%)	14	(0.2%)	2348	(99.3%)	17	(0.7%)	1918	(90.2%)	208	(9.8%)

Source: County of San Diego, Health and Human Services Agency,
Emergency Medical Services. San Diego County Trauma Registry: 2000 – 2010.

The Injury Severity Score (ISS) is a modification of the Abbreviated Injury Scale (AIS) developed to deal with multiple injuries. The ISS incorporates the AIS scores for the most significant injuries in three different body regions. The ISS is calculated by summing the squares of the AIS scores for these injuries. AIS scores up to five are squared, so that the maximum ISS is 75. An AIS score of 6 in any body region is an automatic ISS of 75.

One measure of the demand on the trauma system is hospital length of stay (LOS). During 2010, trauma patients spent a total of 33,877 days admitted to trauma facilities. This means that the trauma system cared for an average of 93 patients per day. Victims of motorcycle (mean 4.2 days) and pedestrian crashes (mean 4.6 days) spent the most time in the hospital on average. Falls resulted in the highest total number of patient days in trauma facilities, making up 35% of the overall length of stay.

Table 1.13: Patient Length of Stay (LOS) in Days, by Mechanism of Injury and Death: 2010

	Survived				Expired			
	Patients	Median LOS	Mean LOS	Total LOS	Patients	Median LOS	Mean LOS	Total LOS
Vehicle Related	**3,821**	**1.18**	**3.40**	**13,007.85**	**79**	**0.50**	**3.20**	**252.51**
MV Occupant	*2,037*	*1.05*	*2.97*	*6,056.42*	*33*	*1.37*	*3.39*	*111.95*
Motorcycle	*537*	*2.03*	*4.16*	*2,231.66*	*9*	*0.74*	*4.21*	*37.89*
Pedalcycle	*494*	*1.03*	*2.90*	*1,432.69*	*5*	*2.61*	*7.17*	*35.86*
Pedestrian	*445*	*1.71*	*4.75*	*2,113.25*	*23*	*0.08*	*1.98*	*45.64*
Other Vehicle	*308*	*1.39*	*3.81*	*1,173.82*	*9*	*1.42*	*2.35*	*21.16*
Falls	**3,442**	**1.69**	**3.32**	**11,424.74**	**84**	**2.87**	**5.96**	**500.78**
Sports/Recreation	**761**	**1.24**	**2.27**	**1,729.85**	**11**	**2.65**	**4.52**	**49.67**
Overall Violence	**1,549**	**1.20**	**3.00**	**4,654.27**	**46**	**0.08**	**2.75**	**126.57**
Self Inflicted/Suicide	*138*	*1.69*	*4.33*	*597.52*	*21*	*0.03*	*1.62*	*34.03*
Assault/Homicide	*1,411*	*1.15*	*2.88*	*4,056.75*	*25*	*0.11*	*3.70*	*92.53*
Other	**567**	**1.13**	**3.46**	**1,961.9**	**19**	**1.75**	**2.87**	**54.59**
Unknown	**20**	**1.46**	**5.74**	**114.89**	**0**	**--**	**--**	**--**
Total	**10,160**	**1.31**	**3.24**	**32,893.5**	**239**	**1.38**	**4.12**	**984.11**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010.

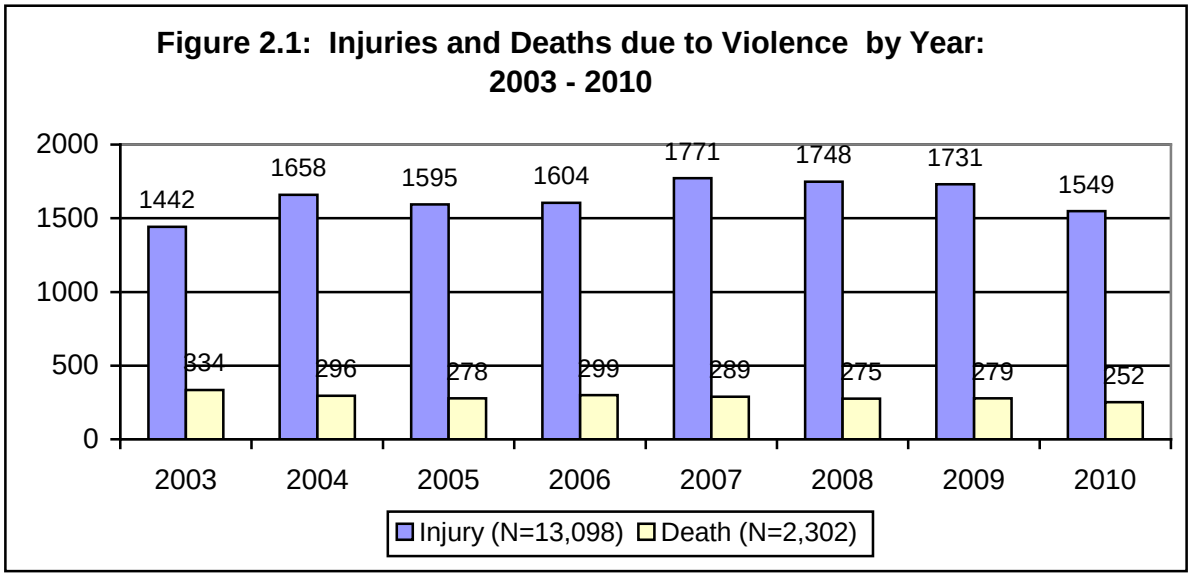
	Total (Survived + Expired)			
	Patients	Median LOS	Mean LOS	Total LOS
Vehicle Related	**3,900**	**1.17**	**3.40**	**13,260.36**
MV Occupant	*2,070*	*1.05*	*2.98*	*6,168.37*
Motorcycle	*546*	*2.02*	*4.16*	*2,269.56*
Pedalcycle	*499*	*1.03*	*2.94*	*1,468.56*
Pedestrian	*468*	*1.61*	*4.61*	*2,158.89*
Other Vehicle	*317*	*1.39*	*3.77*	*1,194.98*
Falls	**3,526**	**1.71**	**3.38**	**11,925.52**
Sport/Rec	**772**	**1.27**	**2.31**	**1,779.52**
Overall Violence	**1,595**	**1.16**	**3.00**	**4,780.84**
Self Inflicted/Suicide	*159*	*1.51*	*3.97*	*631.56*
Assault/Homicide	*1,436*	*1.12*	*2.89*	*4,149.28*
Other	**586**	**1.14**	**3.44**	**2,016.48**
Unknown	**20**	**1.46**	**5.74**	**114.89**
Total	**10,399**	**1.32**	**3.26**	**33,877.61**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010.

Violent Injuries

Violence that results in injury can be interpersonal (assault, homicide, legal intervention) or self-inflicted (self-inflicted injury or suicide). From 2003 through 2010 there were more than 11 times as many interpersonal-related non-fatal injuries as self-inflicted non-fatal injuries, but the majority of fatal violent injuries were self-inflicted. The nonfatal injury rate due to violence (both assault and self-inflicted) experienced a gradual increase from 2003 to 2007 but has subsequently decreased through 2010. Death rates have dropped fairly steadily, with the rate in 2010 (7.83 per 100,000) 30% lower than 2003.

Figure 2.1: Injuries and Deaths due to Violence by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 – 2010.

Table 2.1: Number and Rate (per 100,000) of Injuries and Deaths from Violence by Year: 2003 - 2010

	Injury		Death		Total	
Year	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	1,442	48.69	334	11.28	1,776	59.97
2004	1,658	54.95	296	9.81	1,954	64.76
2005	1,595	52.27	278	9.11	1,873	61.38
2006	1,604	52.30	299	9.75	1,903	62.05
2007	1,771	57.16	289	9.33	2,060	66.49
2008	1,748	55.56	275	8.74	2,023	64.30
2009	1,731	54.55	279	8.79	2,010	63.34
2010	1,549	48.16	252	7.83	1,801	55.99
Total	13,098	52.96	2,302	9.31	15,400	62.27

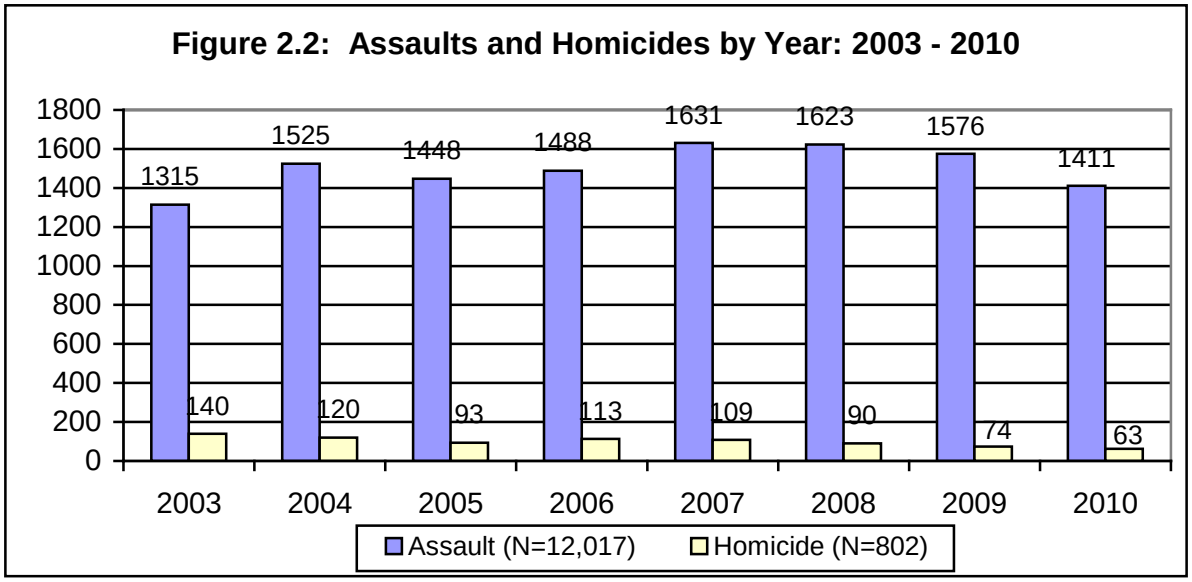
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 – 2010.

Homicide and Assault

Homicide was the fourth leading cause of traumatic death and years of potential life lost during 2010 (see figure 1.2). For every homicide in 2010, trauma centers cared for 22 nonfatal assaults.

Nonfatal assaults increased by 24% from 2003 to 2007, but have dropped by 13.5% from 2007 to 2010. The homicide number and rate in 2010 (63, 1.96 per 100,000) was the lowest in over ten years.

Figure 2.2: Assaults and Homicides by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003-2010.

Table 2.2: Number and Rate (per 100,000) of Assaults and Homicides by Year: 2003 - 2010

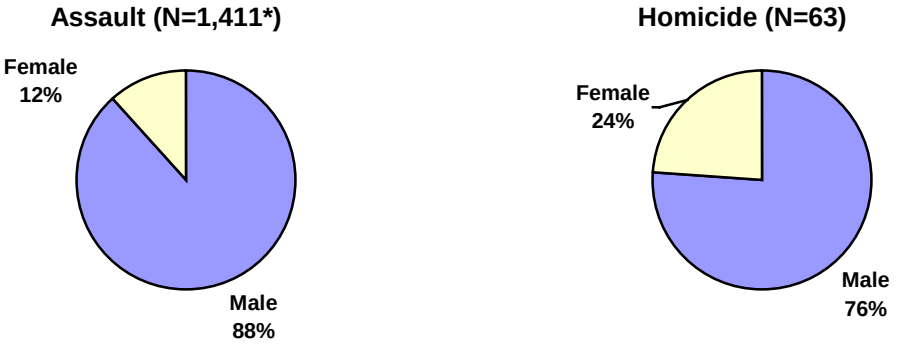
	Assault		Homicide		Total	
Year	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	1,315	44.40	140	4.73	1,455	49.13
2004	1,525	50.54	120	3.98	1,645	54.52
2005	1,448	47.46	93	3.05	1,541	50.50
2006	1,488	48.52	113	3.68	1,601	52.20
2007	1,631	52.64	109	3.52	1,740	56.16
2008	1,623	51.58	90	2.86	1,713	54.45
2009	1,576	49.66	74	2.33	1,650	51.99
2010	1,411	43.87	63	1.96	1,474	45.83
Total	12,017	48.59	802	3.24	12,819	51.83

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 – 2010.

Males were disproportionately affected by interpersonal violence, with 88% of nonfatal injuries from assaults and 76% of homicides.

The age- and gender-specific assault and homicide rates show that males 20-24 years of age were at highest risk for assault injuries (195 per 100,000) and deaths (5.55 per 100,000). The highest risk age group for females was also 20 to 24 years, with an assault rate of 31.6 per 100,000.

Figure 2.3: Assaults and Homicides by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data; 2010.
*Gender was not documented in 2 assaults.

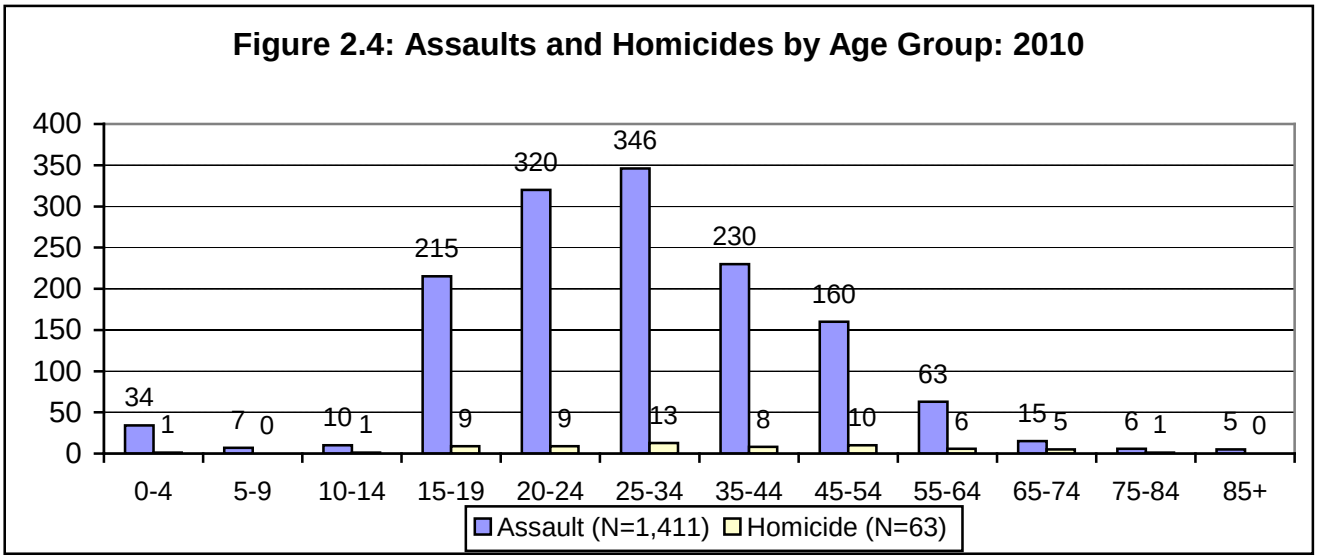
Table 2.3: Number and Rate (per 100,000) of Assaults and Homicides by Age Group and Gender: 2010

Age Group	Assault						Homicide						Overall Total	
	Male		Female		Total		Male		Female		Total			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	24	20.47	10	8.78	34	14.71	1	*	0	*	1	*	35	15.14
5-9	5	4.69	2	*	7	3.33	0	*	0	*	0	*	7	3.33
10-14	7	7.11	3	*	10	5.05	1	*	0	*	1	*	11	5.55
15-19	194	157.77	21	18.20	215	90.20	6	4.88	3	*	9	3.78	224	93.98
20-24	281	194.81	38	31.60	320	120.98	8	5.55	1	*	9	3.40	329	124.38
25-34	310	129.94	36	16.48	346	75.70	10	4.19	3	*	13	2.84	359	78.55
35-44	205	90.15	25	11.12	230	50.85	6	2.64	2	*	8	1.77	238	52.62
45-54	145	64.98	14	6.06	160	35.22	9	4.03	1	*	10	2.20	170	37.42
55-64	51	31.23	12	6.79	63	18.53	3	*	3	*	6	1.77	69	20.30
65-74	13	15.11	2	*	15	8.00	4	*	1	*	5	2.67	20	10.66
75-84	3	*	3	*	6	4.76	0	*	1	*	1	*	7	5.56
85+	5	20.39	0	*	5	7.68	0	*	0	*	0	*	5	7.68
Unknown	0		0		0		0		0		0		0	
Total	1243	77.39	166	10.26	1,411	43.76	48	2.99	15	0.93	63	1.95	1,474	45.71

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population estimates, SANDAG.
*Rates not calculated on less than five incidents.

Figure 2.4 shows the age distribution of assault and homicide. Violent interpersonal injuries cluster strongly in teenagers and young adults, with persons aged 15-34 years sustaining 62% of assaults and 49% of homicides.

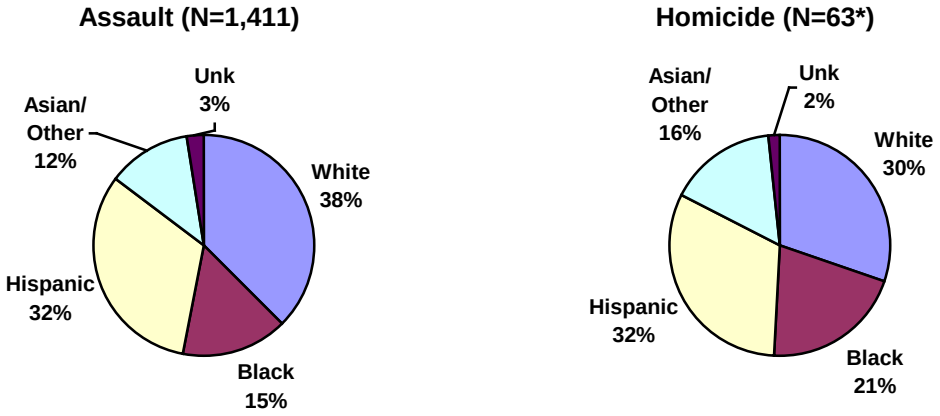
Figure 2.4: Assaults and Homicides by Age Group: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

The Black population was most over-represented among assault and homicide victims. In spite of making up only five percent of the county population (see figure 1.5), 15% of assaults and 26% of homicide victims were Black.

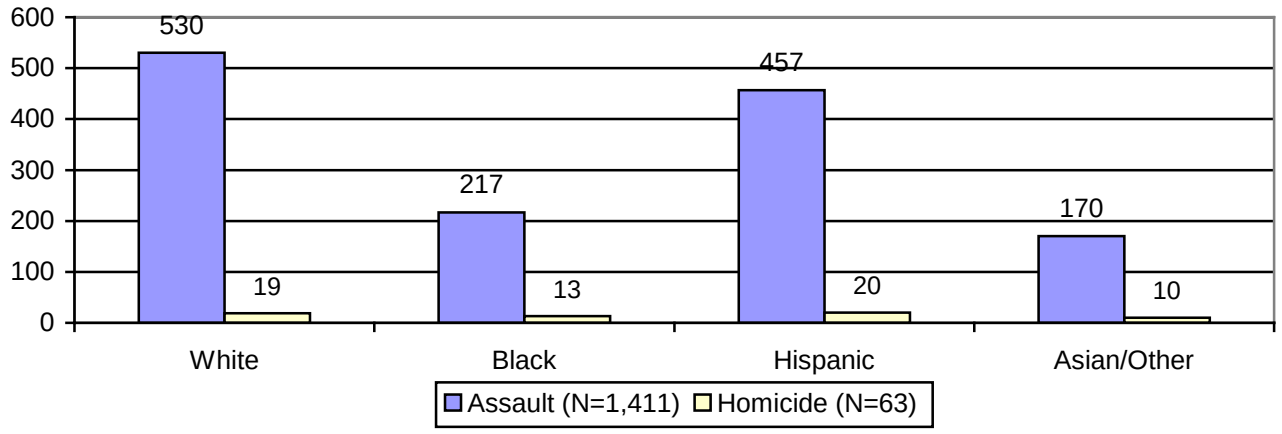
Figure 2.5: Assaults and Homicides by Race/Ethnicity: 2010



*Totals include 37 assaults and 1 homicide with unspecified race/ethnicity
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010.

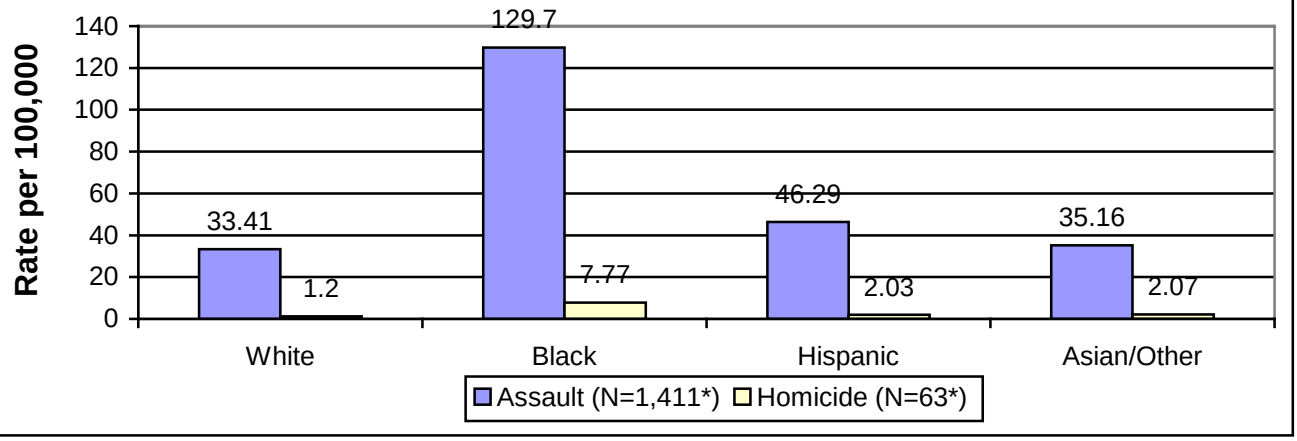
Figure 2.6 shows the number of assaults and homicides by race/ethnicity, while figure 2.7 illustrates the rate per 100,000 population. The highest number of assaults and homicides are seen among the White and Hispanic populations, respectively. The rates shown in figure 2.7, however, show that the Black population is at the highest risk of injury and death from assault.

Figure 2.6: Assaults and Homicides by Race/Ethnicity: 2010



*Totals include 37 assaults and 1 homicide with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, FY 2010.

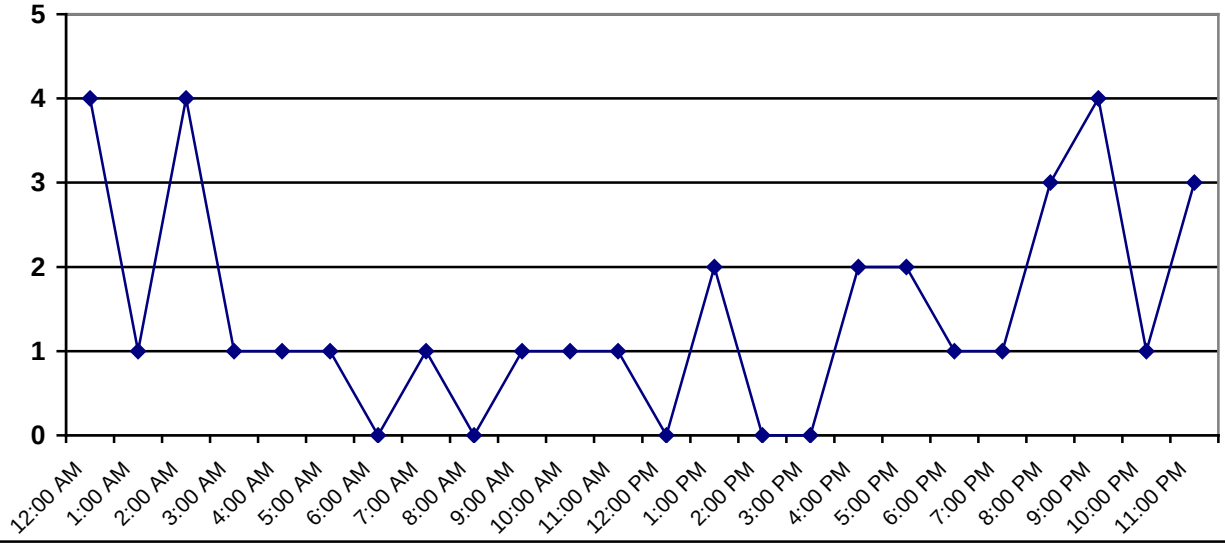
Figure 2.7: Assault and Homicide Rates by Race/Ethnicity: 2010



*Totals include 37 assaults and 1 homicide with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010.

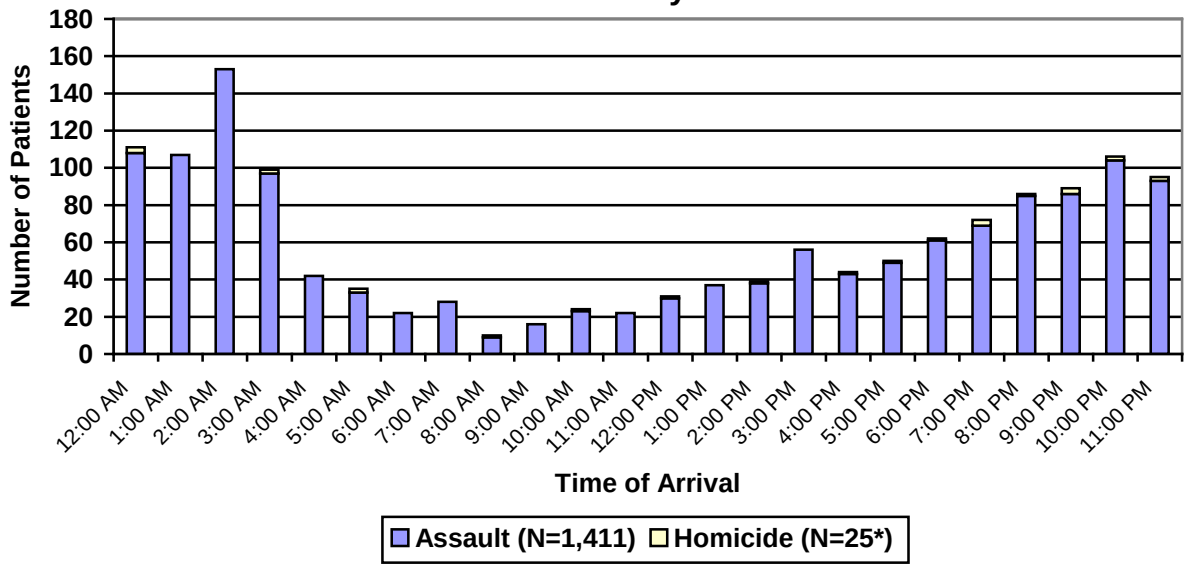
Homicides were most common in the evening hours, with 64% of incidents occurring between 7:00 p.m. and 3:00 a.m. The nocturnal demand on trauma facilities is shown in figure 2.9, which shows that one third of assault-related trauma patients arrived during the four hour period between midnight and 3:59 a.m.

Figure 2.8: Homicides by Known Time of Injury: 2010 (N=35)



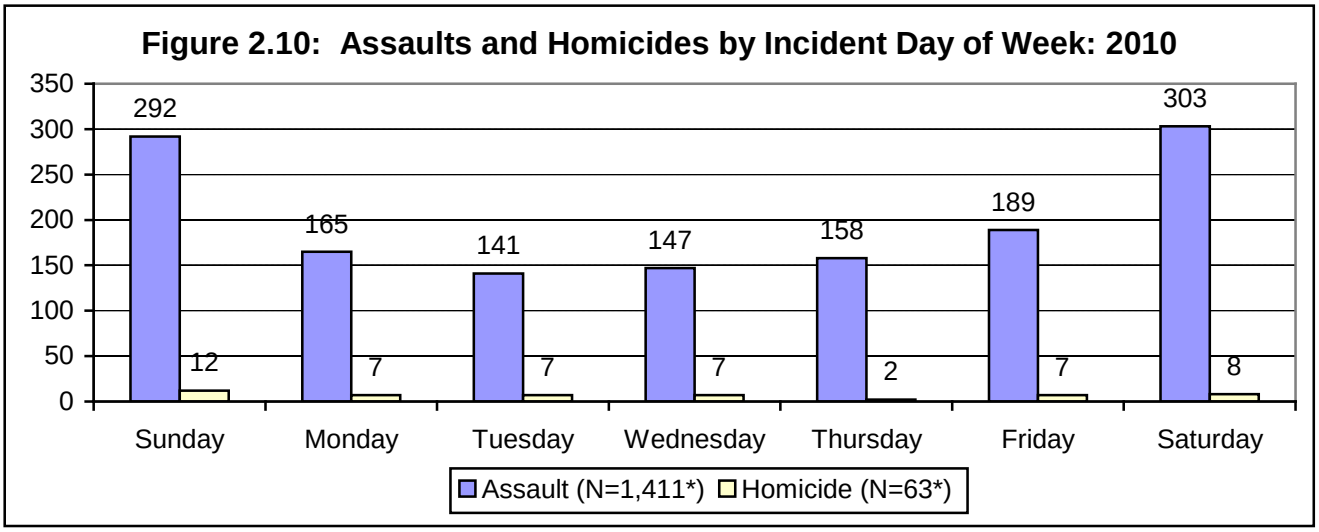
All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
There were 28 homicides with an unidentified time of injury
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Medical Examiner's Data, 2010

Figure 2.9: Assaults and Homicides by Hour of Arrival at Trauma Facility: 2010

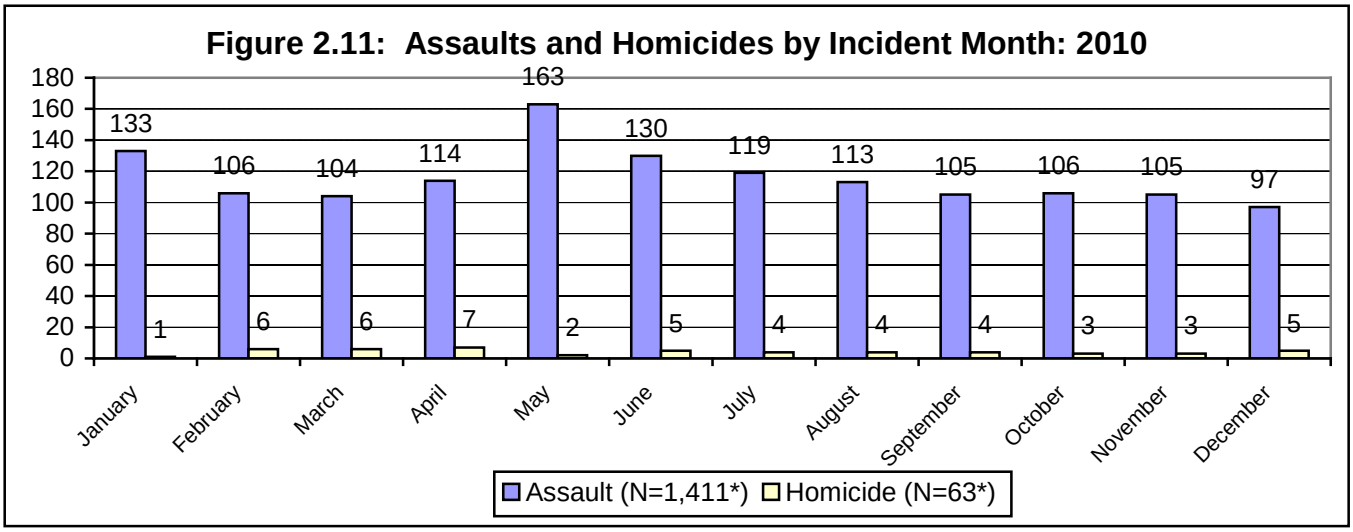


All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene not applicable).
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Weekends saw the highest number of assaults and homicides, with 43% of assaults and 40% of homicides taking place on Saturdays and Sundays. Although seasonal patterns were not evident, May had the highest number of assaults (163) and April had the most homicides (7).



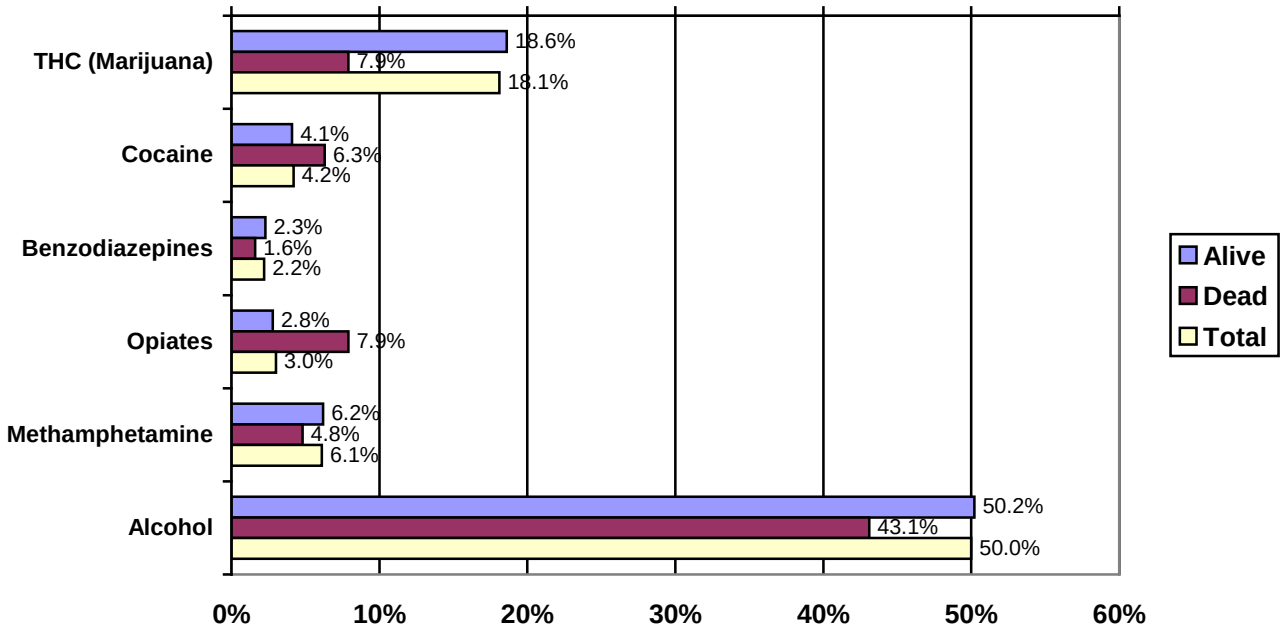
*Totals include 16 assaults and 13 homicides with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010



*Totals include 16 assaults and 13 homicides with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Half of all assault victims tested positive for alcohol. In addition, 18%, or nearly one in five, were positive for marijuana, and six percent for methamphetamine. These results are not mutually exclusive; 58% of THC positive and 37% of methamphetamine positive cases were also positive for alcohol.

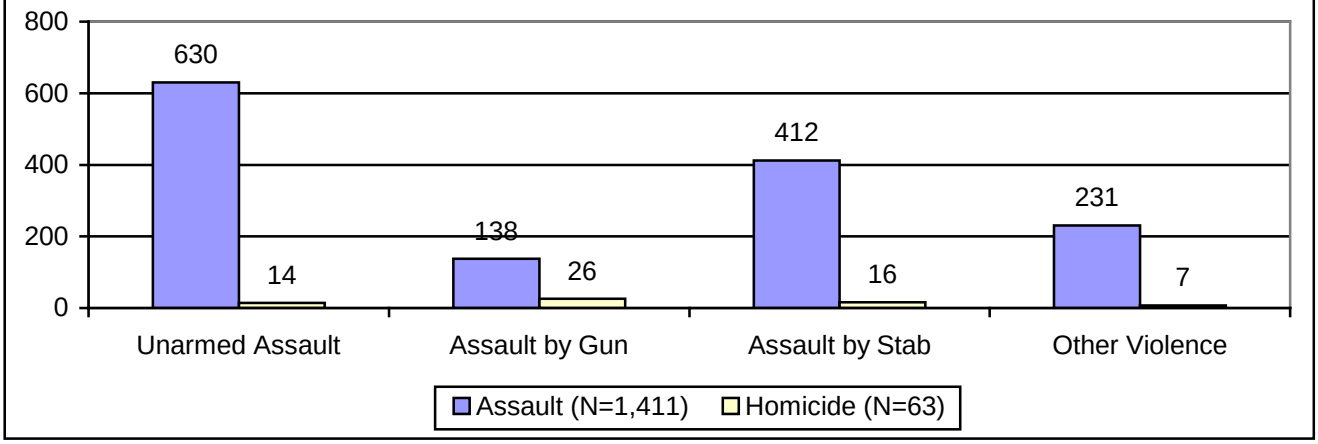
Figure 2.12: Assault/Homicide Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Figure 2.12 shows a breakdown of mechanism of injury for homicides and assaults. Unarmed assaults and stabbings were the leading causes of nonfatal injury, while firearms were the most common mechanism of homicide.

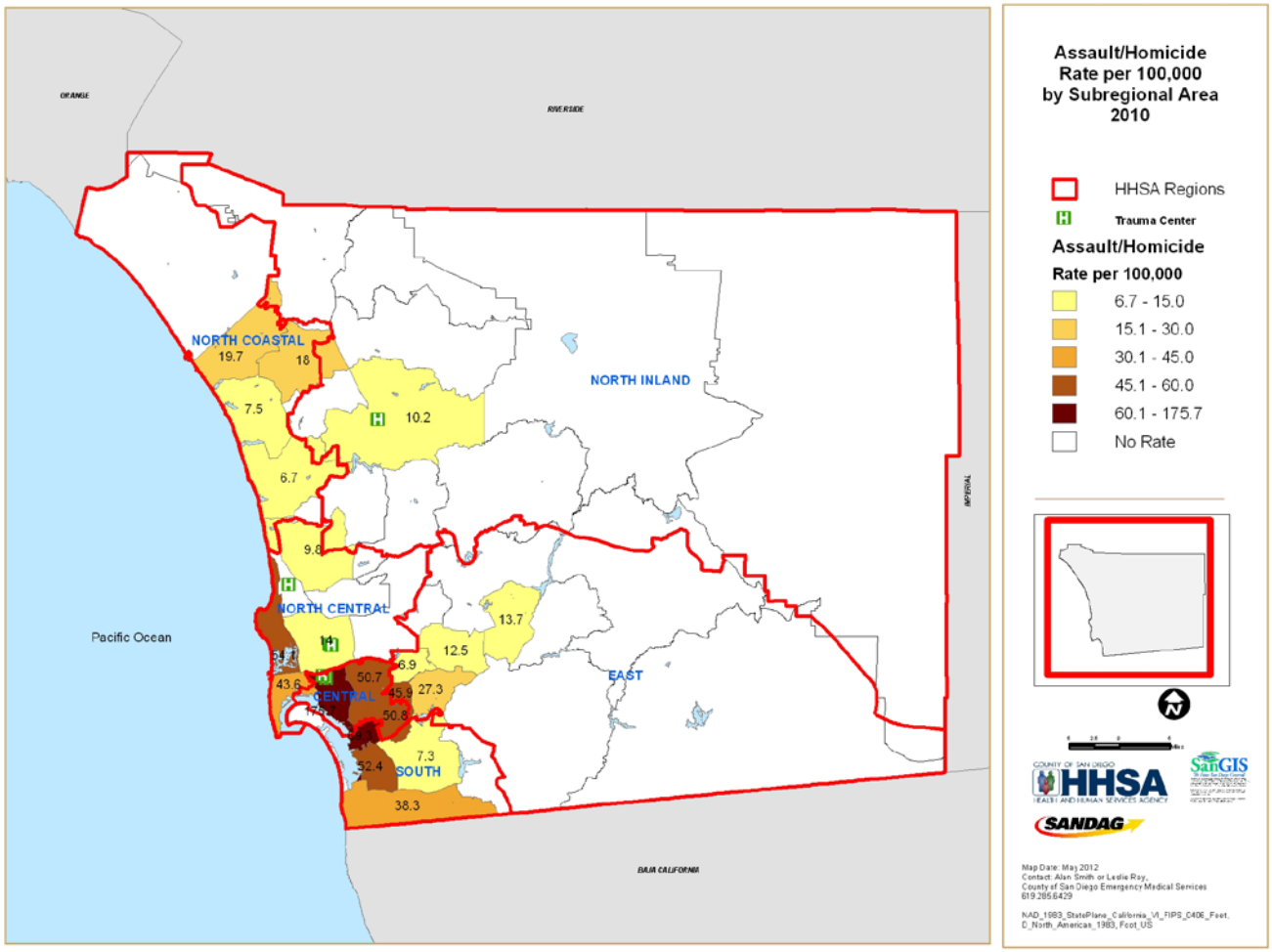
Figure 2.13: Assaults and Homicides by Mechanism: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Rates of injury by subregional areas (SRAs) and Health and Human Services Agency (HHSA) region were calculated from the zip code where the incident took place. The incident zip code was available for 64% of non-fatal assaults and for 83% of homicides. The subregional areas with the highest assault rates were Central (175.7 per 100,000), National City (69.3), Coastal (54.1), Chula Vista (51.1), Mid-City (50.8), and Southeast San Diego (50.7). The Central HHSA Region, which includes the Central, Mid-City, and Southeast SRAs, had an assault rate (94.2) that was double the rate for the county overall. When incident zip code was known, the Central HHSA region accounted for 51% of assaults and 38.5% of homicides. Population estimates for each of the HHSA regions can be found in Appendix B.

Figure 2.14: Assault/Homicide Rates per 100,000 by Subregional Area: 2010



Please note there were 508 assaults and 11 homicides with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2010; Population estimates, San Diego Association of Governments (SANDAG)

Table 2.4: Assaults and Homicides by Incident HHSA Region: 2010

HHSA Region	Assaults		Homicides		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	64	12.35	8	1.54	72	13.90
North Central	106	17.08	5	0.81	111	17.89
Central	461	90.32	20	3.92	481	94.24
South	177	34.44	9	1.75	186	36.19
East	64	12.26	4	*	68	13.03
North Inland	29	5.38	6	1.11	35	6.49
Unknown	510		11		521	
Total	1411	43.76	63	1.95	1474	45.71

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Table 2.5: Assaults and Homicides by Mechanism and County HHSA Region: 2010

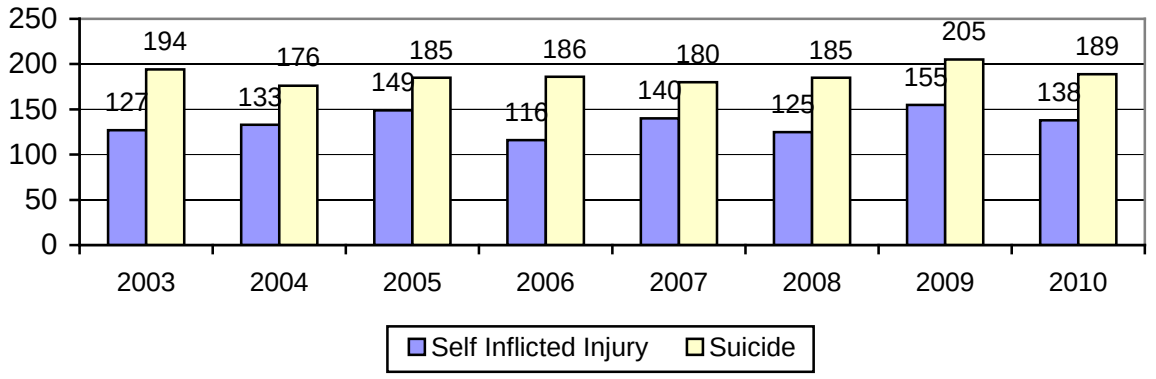
HHSA Region	Unarmed Assault		Gunshot		Stabbing		Other Assault		Overall Total
	Assault	Homicide	Assault	Homicide	Assault	Homicide	Assault	Homicide	
North Coastal	27	2	3	2	33	1	1	3	72
North Central	76	1	1	3	18	0	11	1	111
Central	228	2	46	9	116	9	71	0	481
South	78	3	19	4	54	2	26	0	186
East	19	1	9	2	22	1	14	0	68
North Inland	9	1	2	4	12	1	6	0	35
Unknown	193	4	58	2	157	2	102	3	521
Total	630	14	138	26	412	16	231	7	1474

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Suicides and Self Inflicted Injuries

Suicide[1] was the second leading cause of traumatic death and the number one cause of years of potential life lost during 2010 (see figure 1.2). The figure below shows the number of suicides and self inflicted injuries by year. The number of traumatic suicides has been stable during this time period, averaging 188 per year. Non-fatal self-inflicted traumatic injury numbers are consistently lower than deaths because traumatic means of suicide attempts such as gunshots and jumping from high places tend to be highly fatal.

Figure 2.15: Self Inflicted Injuries and Suicides by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

Table 2.6: Number and Rate (per 100,000) of Self Inflicted Injuries and Deaths by Year: 2003 - 2010

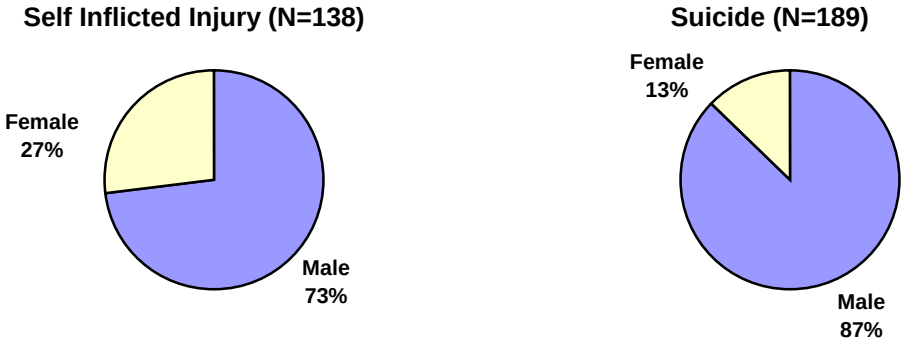
	Injury		Death		Total	
Year	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	127	4.29	194	6.55	321	10.84
2004	133	4.41	176	5.83	309	10.24
2005	149	4.88	185	6.06	334	10.95
2006	116	3.78	186	6.06	302	9.85
2007	140	4.52	180	5.81	320	10.33
2008	125	3.97	185	5.88	310	9.85
2009	155	4.88	205	6.46	360	11.34
2010	138	4.29	189	5.88	327	10.17
Total	1083	4.38	1500	6.07	2583	10.44

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

[1] For the purpose of this report, suicide and self inflicted injury exclude deaths and severe injuries due to poisoning, drowning, or suffocation as they are considered medical rather than traumatic in nature.

Males made up 73% of traumatic self inflicted injuries and 87% of suicides. As Table 2.3 shows, the traumatic suicide rate is highest among older men, with the rate among 75 to 84 year olds 2.6 times higher, and for men 85 years and older nearly six times higher than the rate for all ages combined.

Figure 2.16: Self Inflicted Injuries and Suicides by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 2.7: Number and Rate (per 100,000) of Self Inflicted Injuries and Suicides by Age Group and Gender: 2010

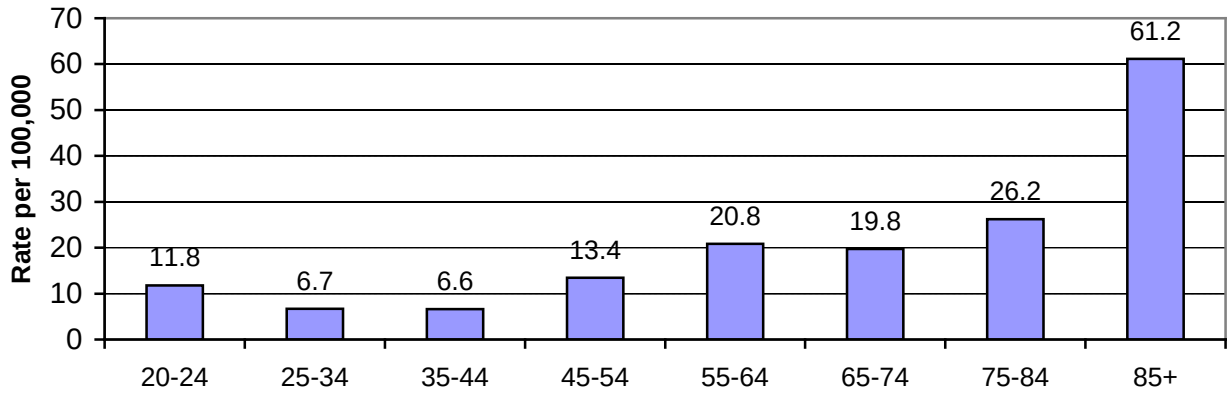
Age Group	Self Inflicted Injury						Suicide						Overall Total	
	Male		Female		Total		Male		Female		Total			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	0	*	0	*	0	*	0	*	0	*	0	*	0	*
5-9	0	*	1	*	1	*	0	*	0	*	0	*	1	*
10-14	0	*	0	*	0	*	2	*	0	*	2	*	2	*
15-19	4	*	6	5.20	10	4.20	5	4.07	1	*	6	2.52	16	6.71
20-24	15	10.40	5	4.16	20	7.56	17	11.79	2	*	19	7.18	39	14.74
25-34	32	13.41	5	2.29	37	8.10	16	6.71	2	*	18	3.94	55	12.03
35-44	19	8.36	7	3.11	26	5.75	15	6.60	0	*	15	3.32	41	9.07
45-54	16	7.17	6	2.60	22	4.84	30	13.44	8	3.46	38	8.37	60	13.21
55-64	8	4.90	6	3.40	14	4.12	34	20.82	6	3.40	40	11.77	54	15.89
65-74	4	*	0	*	4	*	17	19.76	3	*	20	10.66	24	12.80
75-84	1	*	1	*	2	*	14	26.21	2	*	16	12.70	18	14.29
85+	2	*	0	*	2	*	15	61.18	0	*	15	23.05	17	26.12
Total	**101**	**6.29**	**37**	**2.29**	**138**	**4.28**	**165**	**10.27**	**24**	**1.48**	**189**	**5.86**	**327**	**10.14**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

*Rates not calculated on less than five incidents.

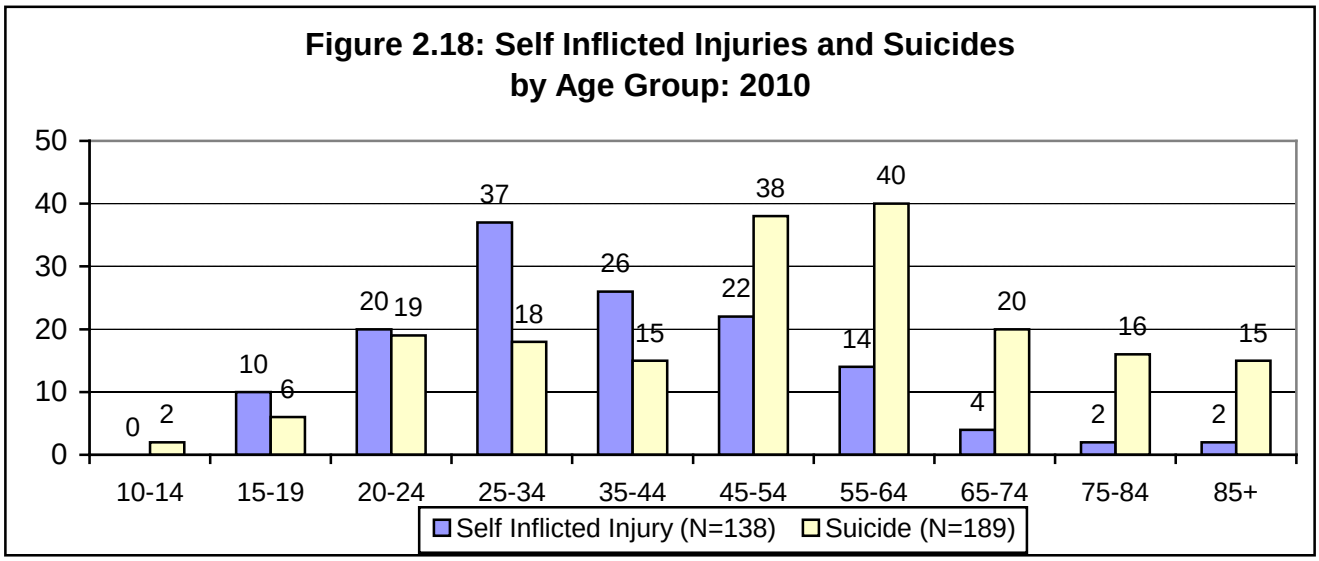
While the highest rates of suicide were found in elderly males, the highest numbers of nonfatal injury, and therefore the group with the greatest impact on the trauma system, were younger than 55 years. For men and women combined, 62% of nonfatal self inflicted injuries and 38% of deaths from traumatic suicide were between 25 and 54 years of age.

Figure 2.17: Traumatic Suicide Rates by Age Group: Males, 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

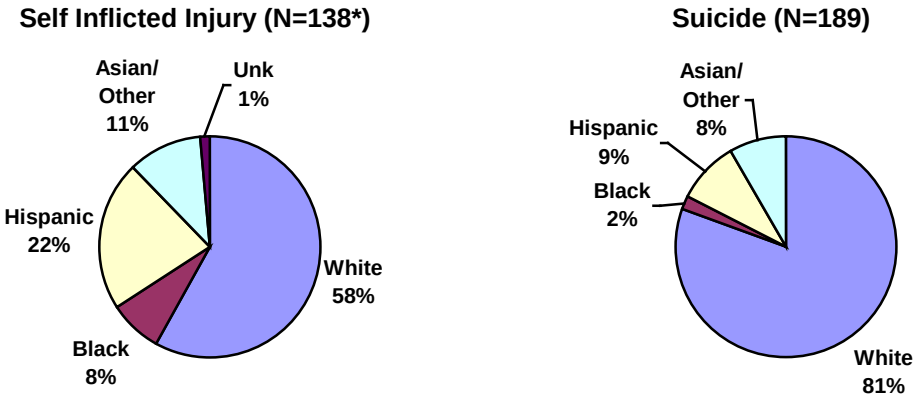
Figure 2.18: Self Inflicted Injuries and Suicides by Age Group: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

The White population makes up 49% of the county, but 81% of deaths from suicide. The racial distribution of nonfatal traumatic self inflicted injuries was closer to the overall population makeup.

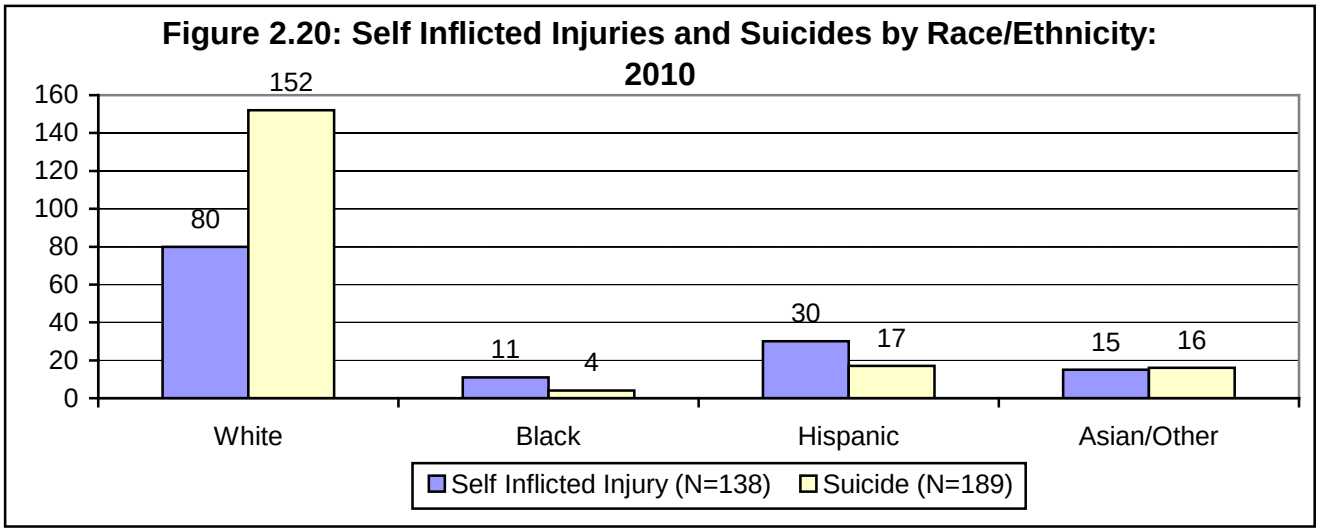
Figure 2.19: Self Inflicted Injuries and Suicides by Race/Ethnicity: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010
*Totals include two self inflicted injuries of undetermined race/ethnicity.

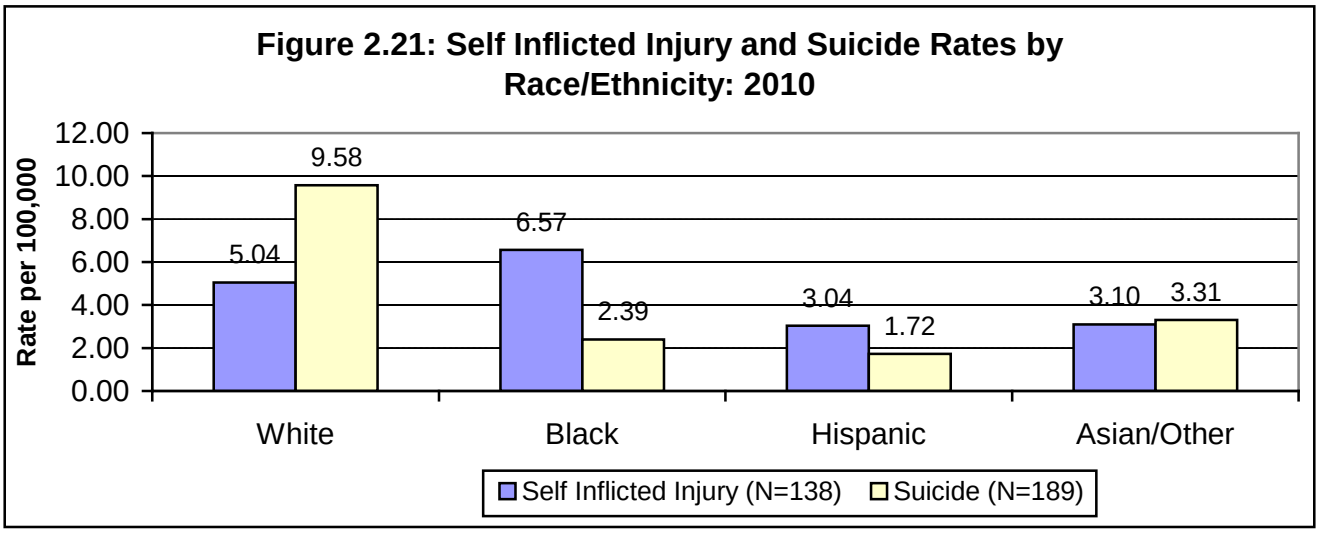
The traumatic suicide rate in the White population was considerably higher than in any other race/ethnic group. The rate of nonfatal injuries per 100,000, however, was highest in the black population.

Figure 2.20: Self Inflicted Injuries and Suicides by Race/Ethnicity: 2010



*Totals include two self inflicted injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

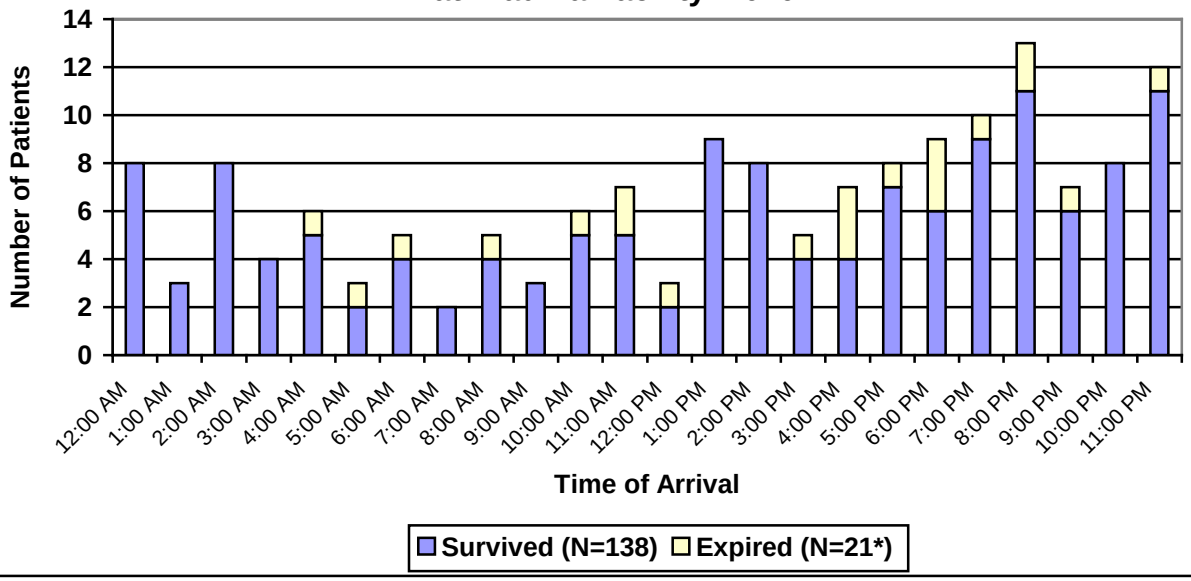
Figure 2.21: Self Inflicted Injury and Suicide Rates by Race/Ethnicity: 2010



*Totals include two self inflicted injuries with unspecified race/ethnicity.
**Rates not calculated for fewer than five incidents.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Self inflicted injuries did not follow a distinct pattern regarding time of arrival at trauma facilities, although the hour with the most arrivals was between 8 and 9 p.m.

Figure 2.22: Self Inflicted Injuries and Suicides by Hour of Arrival at Trauma Facility: 2010

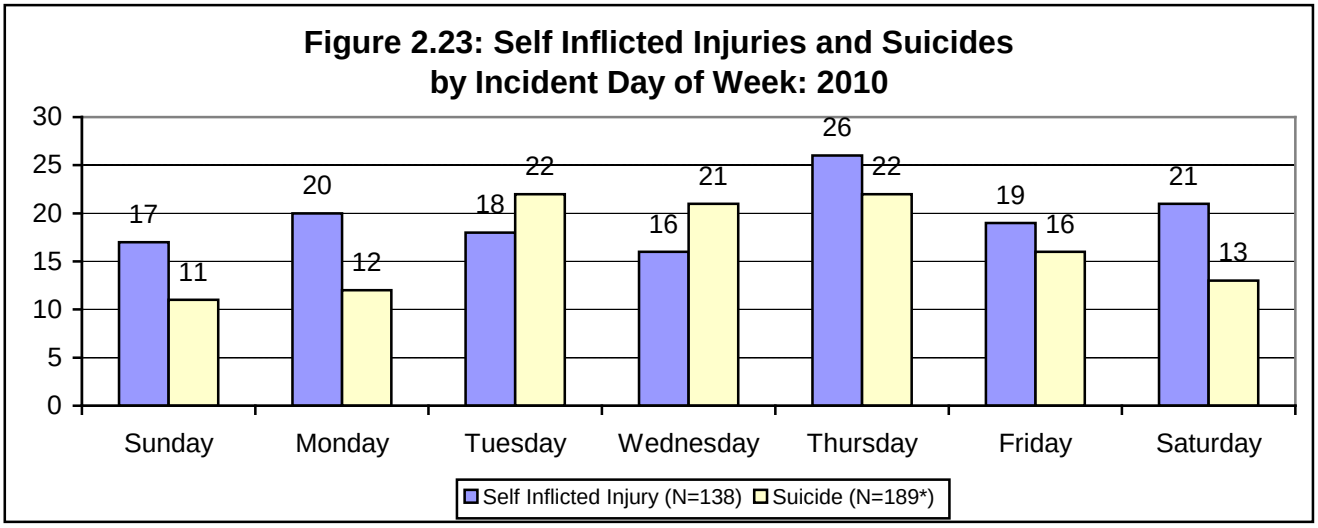


All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010

Tuesday and Thursday had the greatest number suicides (22 each). Thursdays had the highest number of nonfatal self inflicted injuries (26).

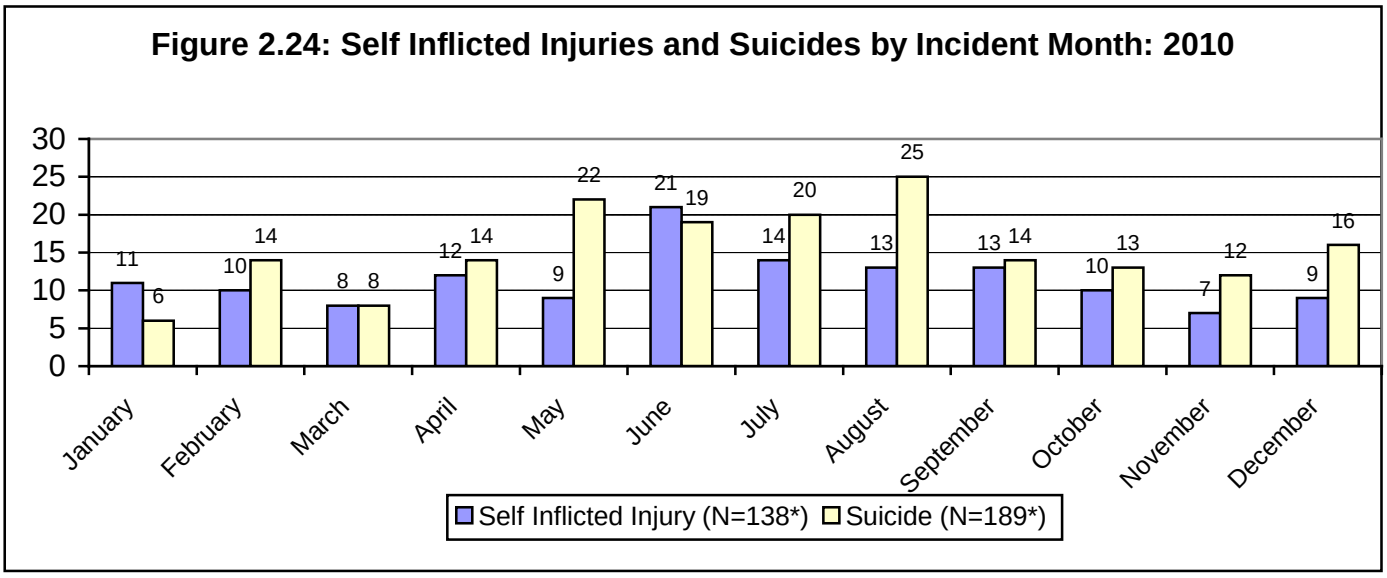
August had the highest number of suicides (25), while the peak for nonfatal self inflicted injuries occurred in June (21).

Figure 2.23: Self Inflicted Injuries and Suicides by Incident Day of Week: 2010



*Totals include one self inflicted injury and 72 suicides with unspecified incident date.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

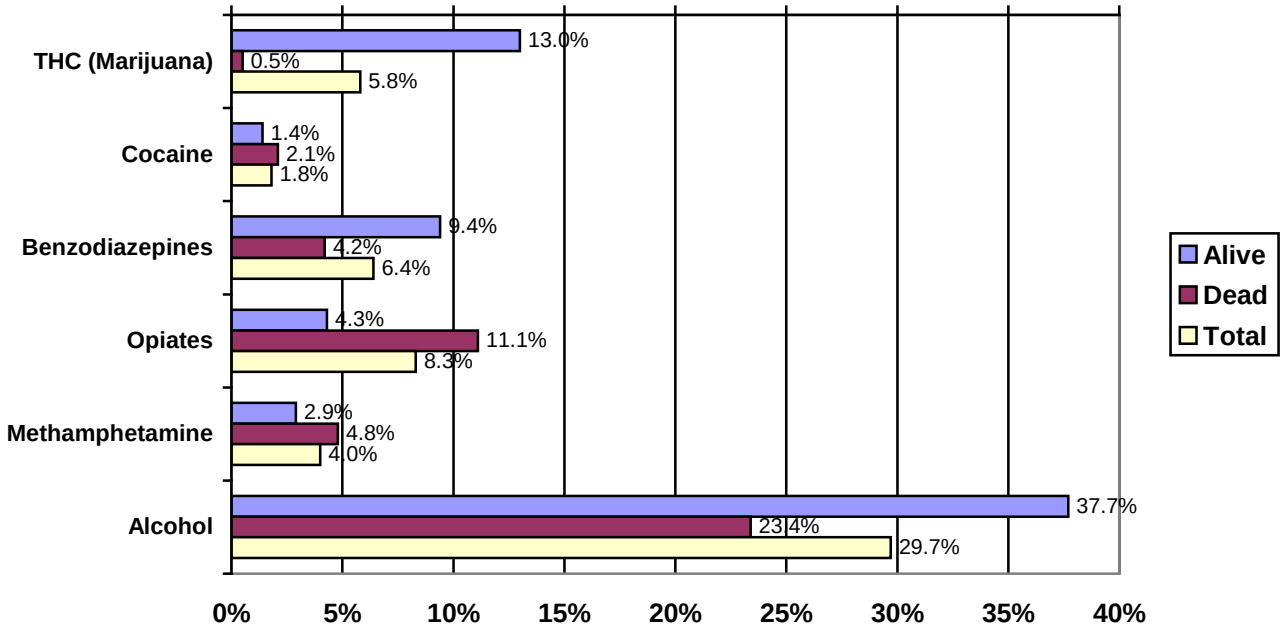
Figure 2.24: Self Inflicted Injuries and Suicides by Incident Month: 2010



*Totals include one self-inflicted injury and six suicides with unspecified incident month.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Alcohol was the most commonly occurring substance found in toxicology tests of patients with self-inflicted injuries (29.7%), followed by opiates (8.3%) and benzodiazepines (6.4%).

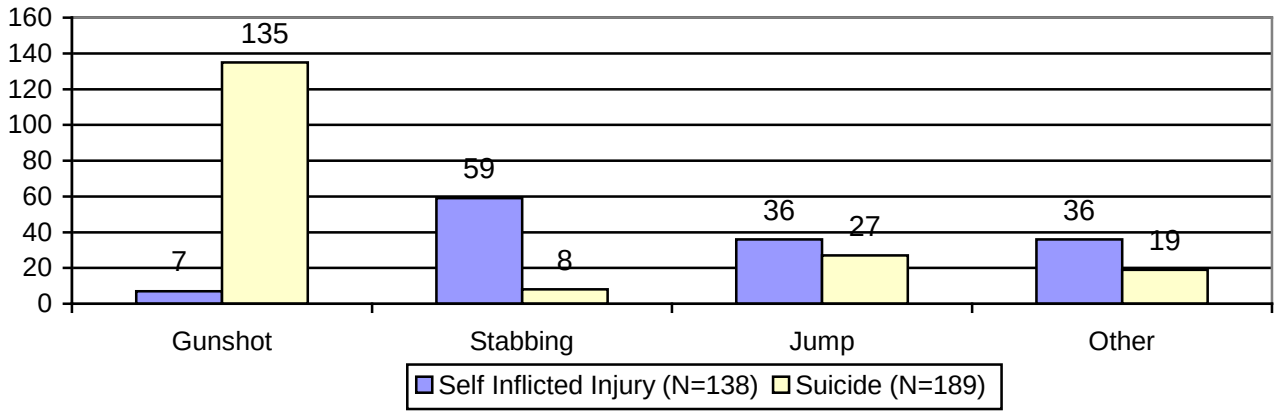
Figure 2.25: Self-Inflicted/Suicide Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Nonfatal self inflicted injuries were very different from suicides with regard to the mechanism of injury. Gunshot wounds were the mechanism for 71% of suicides, but only made up 5% of nonfatal self inflicted injuries. Self inflicted cut or stab wounds, meanwhile, made up only 4% of suicides, but 43% of nonfatal self inflicted injuries.

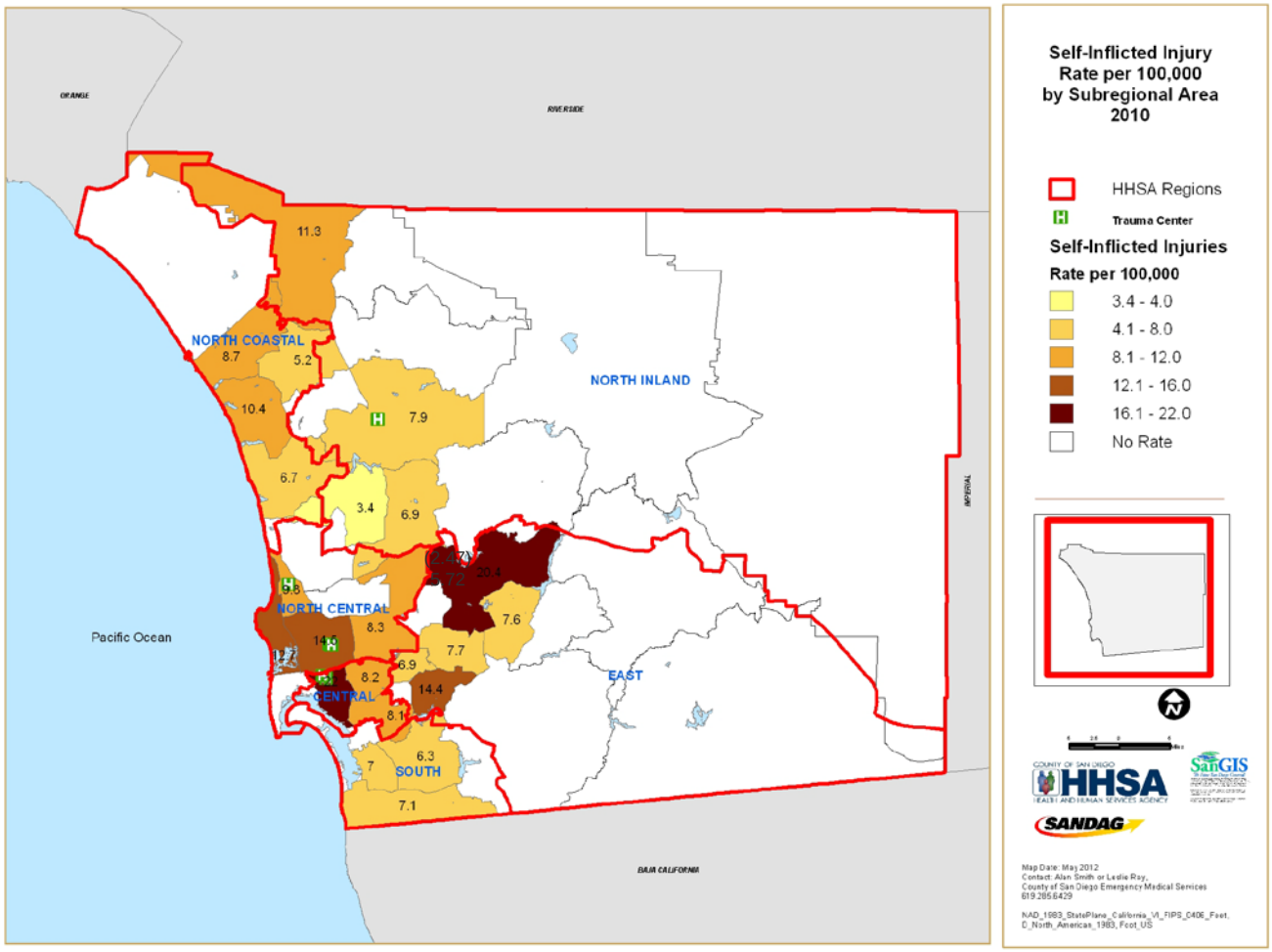
Figure 2.26: Self Inflicted Injuries and Suicides by Mechanism: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 73% of non-fatal self inflicted injuries and for 98% of suicides. The highest rate of traumatic suicide and nonfatal self inflicted injuries combined were in the SRAs of Central San Diego and Lakeside. At the HHSA Region level, the highest combined rate was in the Central HHSA region (12.9 per 100,000). Population estimates for each of the MSAs can be found in Appendix B.

Figure 2.27: Self Inflicted Injury and Suicide Rates per 100,000 by Subregional Area: 2010



Please note there were 37 self inflicted injuries and four suicides with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2010; Population estimates, San Diego Association of Governments (SANDAG)

Table 2.8: Self Inflicted Injuries and Suicides by Incident HHSA Region: 2010

HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
Central	33	6.47	33	6.47	66	12.93
East	15	2.87	33	6.32	48	9.20
North Central	14	2.26	45	7.25	59	9.51
North Coastal	9	1.74	27	5.21	36	6.95
North Inland	14	2.59	27	5.00	41	7.60
South	16	3.11	20	3.89	36	7.00
Unknown	37	--	4	--	41	--
Total	**138**	**4.28**	**189**	**5.86**	**327**	**10.14**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Table 2.9: Self Inflicted Injuries and Suicides by Mechanism and HHSA Region: 2010

HHSA Region	Gunshot		Stabbing		Jump		Other		Overall Total
	Injury	Death	Injury	Death	Injury	Death	Injury	Death	
Central	1	14	12	1	9	16	11	2	66
East	2	30	9	0	2	0	2	3	48
North Central	0	35	7	1	4	7	3	2	59
North Coastal	1	20	5	2	2	0	1	5	36
North Inland	1	20	10	2	1	2	2	3	41
South	1	15	4	2	4	1	7	2	36
Unknown	1	1	12	0	14	1	10	2	41
Total	**7**	**135**	**59**	**8**	**36**	**27**	**36**	**19**	**327**

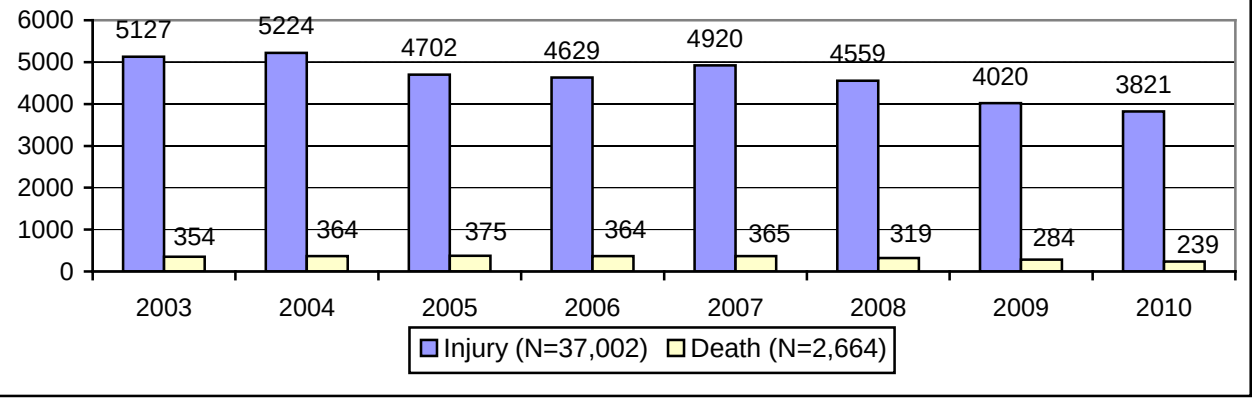
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Transportation Related Injuries

Transportation related crashes are those that occur to motor vehicle occupants, motorcyclists, pedalcyclists, pedestrians struck by motor vehicles, and other vehicle occupants. There were 239 lives lost in transportation related crashes during 2010. For every patient who died as a result of a transportation related crash, 16 others were injured in such a crash.

Injuries and deaths from motor vehicle crashes have experienced a significant downward trend over the past eight years. From 2003 to 2010, the nonfatal injury rate dropped by 31% and the death rate fell by 38%.

Figure 3.1: Transportation Related Injuries and Deaths by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

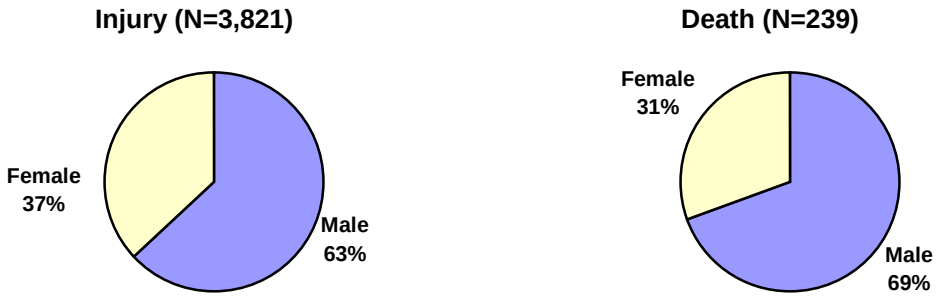
Table 3.1: Number and Rate (per 100,000) of Transportation Related Injuries and Deaths by Year: 2003 - 2010

Year	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	5,127	173.12	354	11.95	5,481	185.07
2004	5,224	173.14	364	12.06	5,588	185.20
2005	4,702	154.10	375	12.29	5,077	166.39
2006	4,629	150.94	364	11.87	4,993	162.81
2007	4,920	158.80	365	11.78	5,285	170.58
2008	4,559	144.90	319	10.14	4,878	155.04
2009	4,020	126.68	284	8.95	4,304	135.63
2010	3,821	118.80	239	7.43	4,060	126.23
Total	**37,002**	**149.62**	**2,664**	**10.77**	**39,666**	**160.39**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

Males made up 63% of injuries and 69% of deaths related to transportation. Rates of both injury and death were substantially higher in males throughout the age spectrum.

Figure 3.2: Transportation Related Injuries and Deaths by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data; 2010.
Note: Gender not documented on two injuries

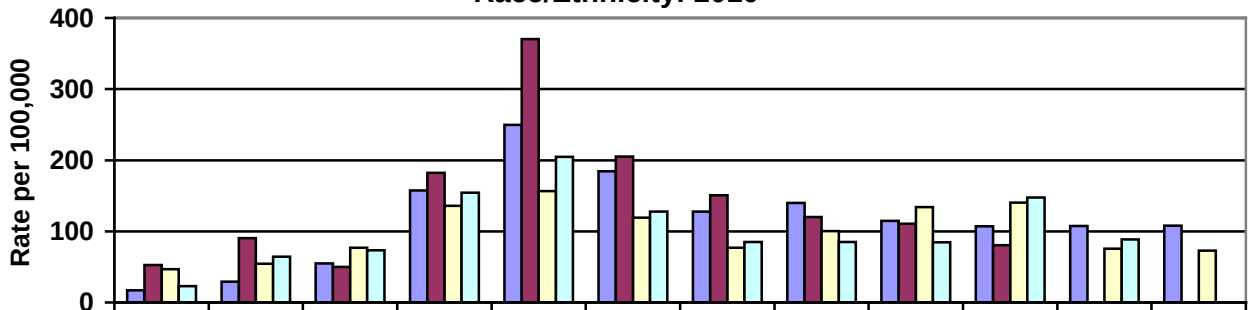
Table 3.2: Number and Rate (per 100,000)* of Transportation Related Injuries and Deaths by Age Group and Gender: 2010

Age Group	Injury						Death							
	Male		Female		Total		Male		Female		Total		Overall Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	43	36.67	35	30.74	79	34.18	3	*	2	*	5	2.16	84	36.34
5-9	63	59.07	40	38.65	103	49.01	2	*	3	*	5	2.38	108	51.39
10-14	90	91.36	44	44.17	134	67.63	0	*	1	*	1	*	135	68.14
15-19	232	188.67	129	111.79	361	151.45	11	8.95	7	6.07	18	7.55	379	159.00
20-24	375	259.97	208	172.95	584	220.78	20	13.87	9	7.48	29	10.96	613	231.75
25-34	453	189.88	252	115.34	705	154.25	21	8.80	11	5.03	32	7.00	737	161.25
35-44	312	137.21	173	76.93	485	107.24	27	11.87	7	3.11	34	7.52	519	114.75
45-54	372	166.70	193	83.51	565	124.38	28	12.55	16	6.92	44	9.69	609	134.06
55-64	252	154.32	141	79.83	393	115.61	23	14.08	4	*	27	7.94	420	123.55
65-74	123	142.94	99	97.52	222	118.36	11	12.78	4	*	15	8.00	237	126.35
75-84	66	123.56	62	85.47	128	101.63	9	16.85	6	8.27	15	11.91	143	113.54
85+	30	122.36	32	78.88	62	95.26	9	36.71	3	*	12	18.44	74	113.70
Unknown	0	--	0	--	0	--	2	--	0	--	2	--	2	--
Total	**2,411**	**150.12**	**1,408**	**87.00**	**3,821**	**118.50**	**166**	**10.34**	**73**	**4.51**	**239**	**7.41**	**4,060**	**125.91**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data 2010; Population estimates, SANDAG
*Rates not calculated on fewer than five incidents
Note: total includes 2 cases with undocumented gender.

The highest overall rates of transportation related injury were in the 20 to 24 year age groups. Black 20 to 24 year olds had the highest injury rate, at 370 per 100,000. Death rates were highest among whites 85 years of age and older (22 per 100,000).

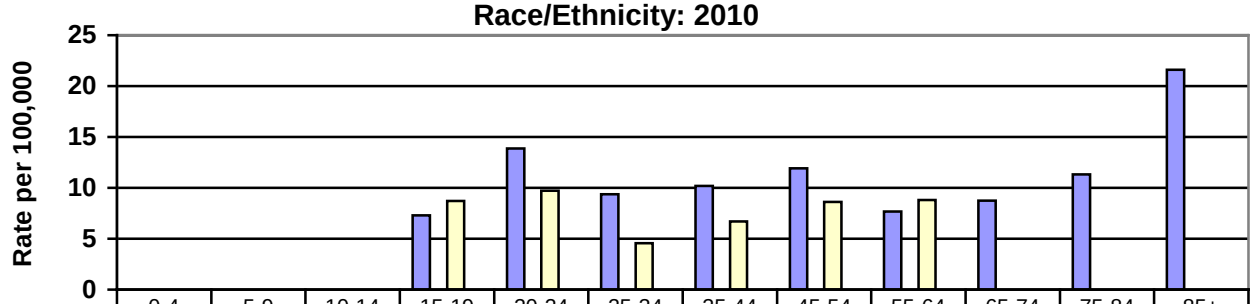
Figure 3.3: Transportation Related Injury Rates by Age and Race/Ethnicity: 2010



	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
White	17.0	29.3	54.7	157.3	249.7	184.6	127.7	140.0	114.7	107.2	107.7	108.0
Black	52.6	90.5	50.1	182.0	370.3	205.3	150.8	120.0	110.7	80.7	*	*
Hispanic	46.8	54.7	76.8	136.1	156.5	119.4	77.1	100.5	133.9	140.6	75.6	73.0
Asian/Other	23.0	64.5	73.2	154.3	204.6	127.6	84.8	84.8	84.7	147.6	88.8	*

Note: Rates not calculated on fewer than five incidents
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Population estimates, SANDAG

Figure 3.4: Transportation Related Death Rates by Age and Race/Ethnicity: 2010

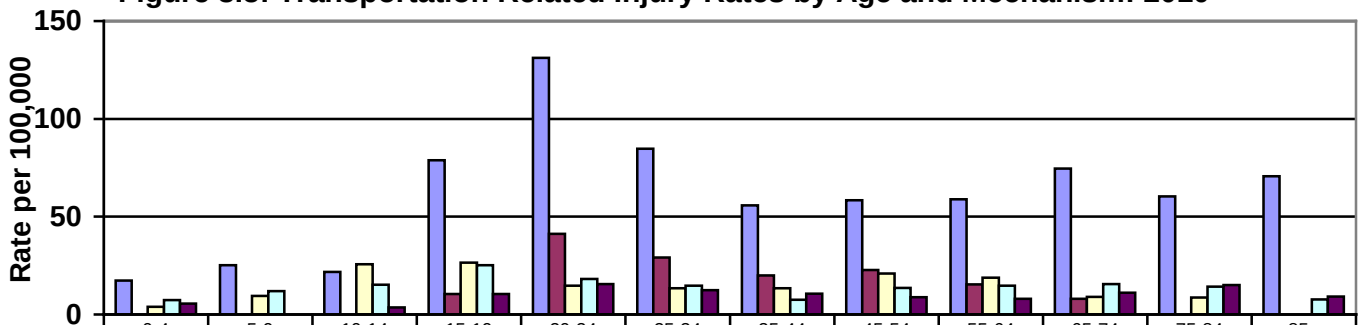


	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
White	*	*	*	7.3	13.9	9.4	10.2	11.9	7.7	8.7	11.3	21.6
Black	*	*	*	*	*	*	*	*	*	*	*	*
Hispanic	*	*	*	8.7	9.7	4.6	6.7	8.6	8.8	*	*	*
Asian/Other	*	*	*	*	*	*	*	*	*	*	*	*

Note: Rates not calculated on fewer than five incidents
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Population estimates, SANDAG

Motor vehicle occupant crashes accounted for a significantly higher rate of death and severe injury than other transportation related mechanisms of injury for most age groups. The highest rate of transportation related severe injury was found in motor vehicle occupants aged 20-24 (131 injuries per 100,000 population), while the highest death rate was among motor vehicle occupants 85 years of age and older (16.9 deaths per 100,000 population).

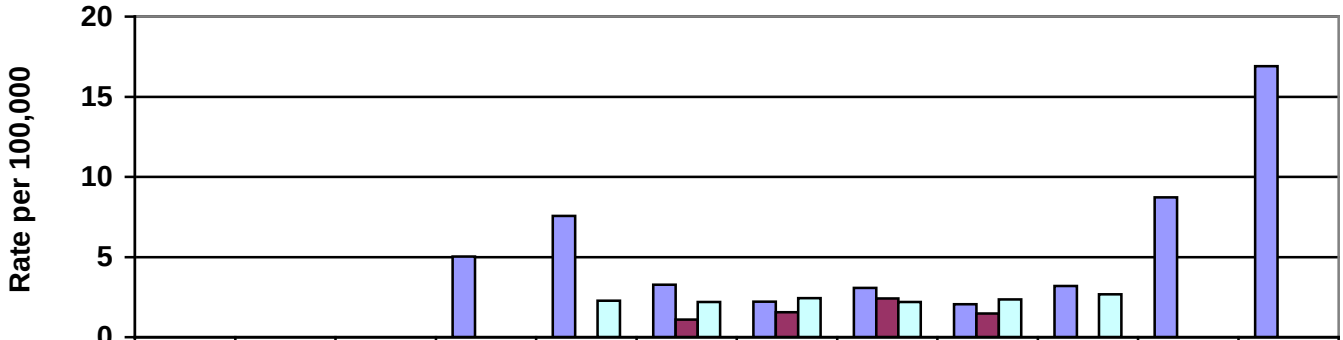
Figure 3.5: Transportation Related Injury Rates by Age and Mechanism: 2010



	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
MV Occupant	17.3	25.2	21.7	78.9	131.2	84.7	55.7	58.3	58.8	74.6	60.3	70.7
Motorcycle	*	*	*	10.5	41.2	29.1	19.9	22.7	15.3	8.0	*	*
Pedalcycle	3.9	9.5	25.7	26.4	14.7	13.4	13.5	20.9	18.8	9.1	8.7	*
Pedestrian	7.4	11.9	15.1	25.2	18.2	14.7	7.5	13.7	14.7	15.5	14.3	7.7
Other Vehicle	5.6	*	3.5	10.5	15.5	12.5	10.6	8.8	7.9	11.2	15.1	9.2

*Rates not calculated on fewer than five incidents
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Population estimates, SANDAG

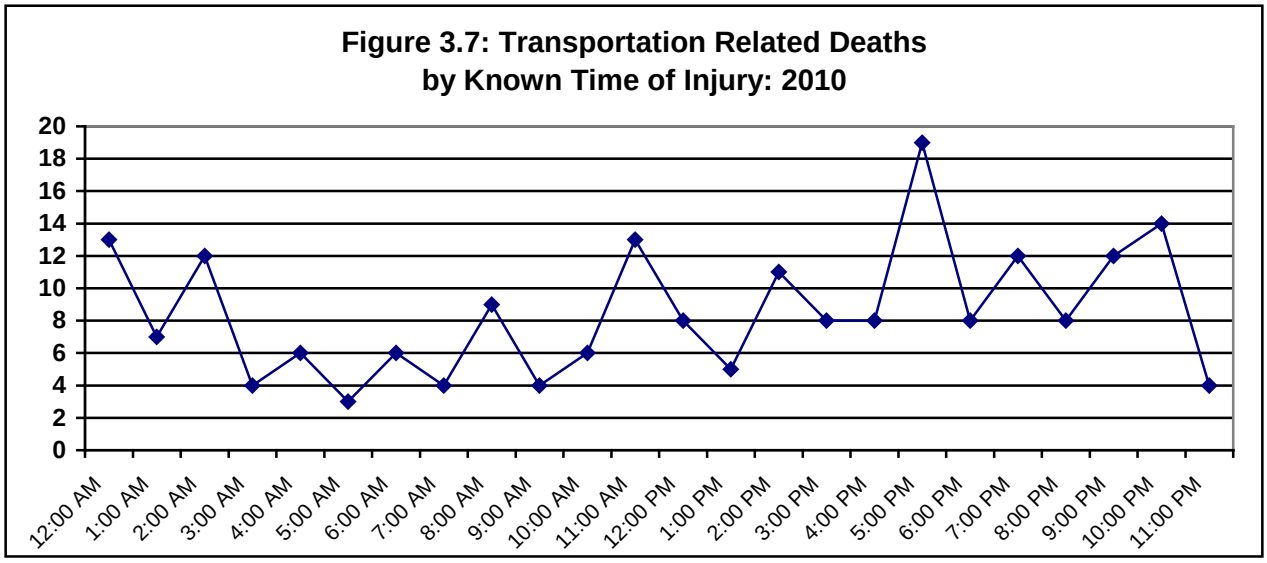
Figure 3.6: Transportation Related Death Rates by Age and Mechanism: 2010



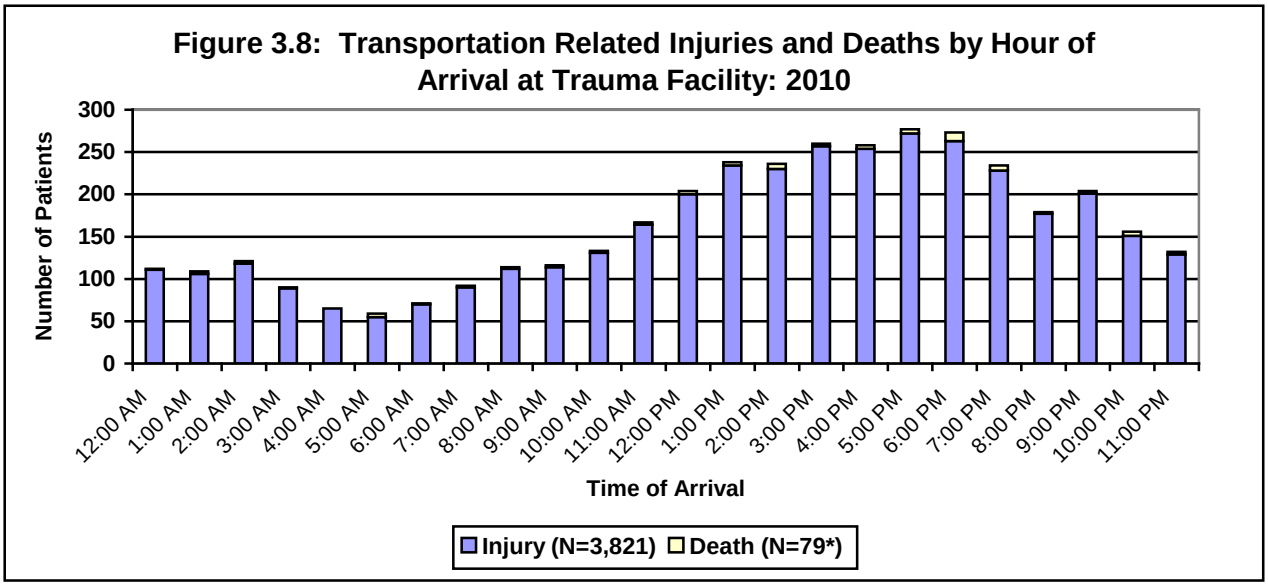
	0-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
MV Occupant	*	*	*	5.0	7.6	3.3	2.2	3.1	2.1	3.2	8.7	16.9
Motorcycle	*	*	*	*	*	1.1	1.6	2.4	1.5	*	*	*
Pedestrian	*	*	*	*	2.3	2.2	2.4	2.2	2.4	2.7	*	*

*Rates not calculated on fewer than five incidents
Note: Rates could not be calculated for deaths related to pedalcycles or other vehicles due to small numbers.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Population estimates, SANDAG

Transportation-related crashes resulting in deaths peaked during the late afternoon and early evening hours, reaching a maximum of 19 during the hour between 5:00 and 6:00 pm. The frequency of transportation-related trauma patient arrivals increased steadily through the day from the 5:00 am hour (59 total patients for the year), to 5:00 pm (277 patients), and declined steadily after 6:00 pm.



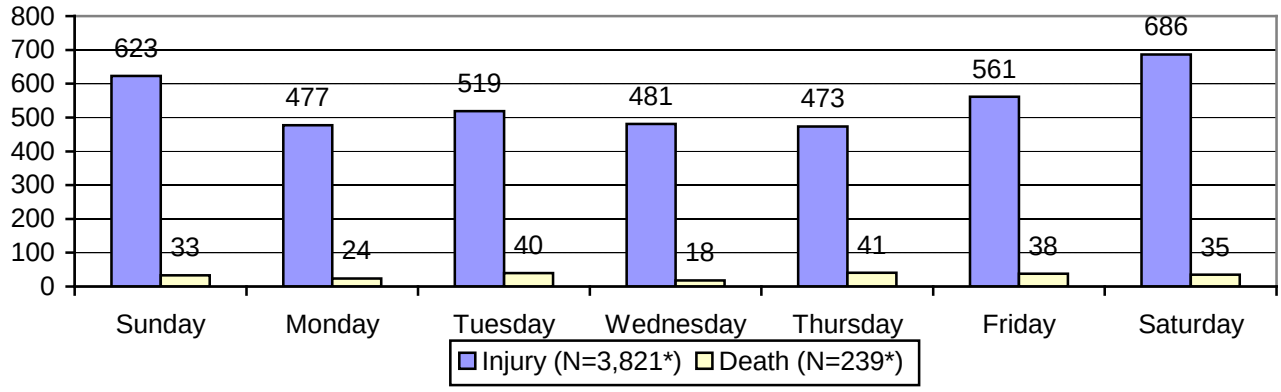
All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
There were 30 deaths with an unidentified time of injury
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Medical Examiner's Data, 2010



*Limited to patients arriving at trauma facilities (deaths on scene not applicable).
All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Saturdays and Sundays experienced the greatest numbers of injuries (34% of injuries), while deaths occurred with highest frequency on Tuesdays and Thursdays (35%).

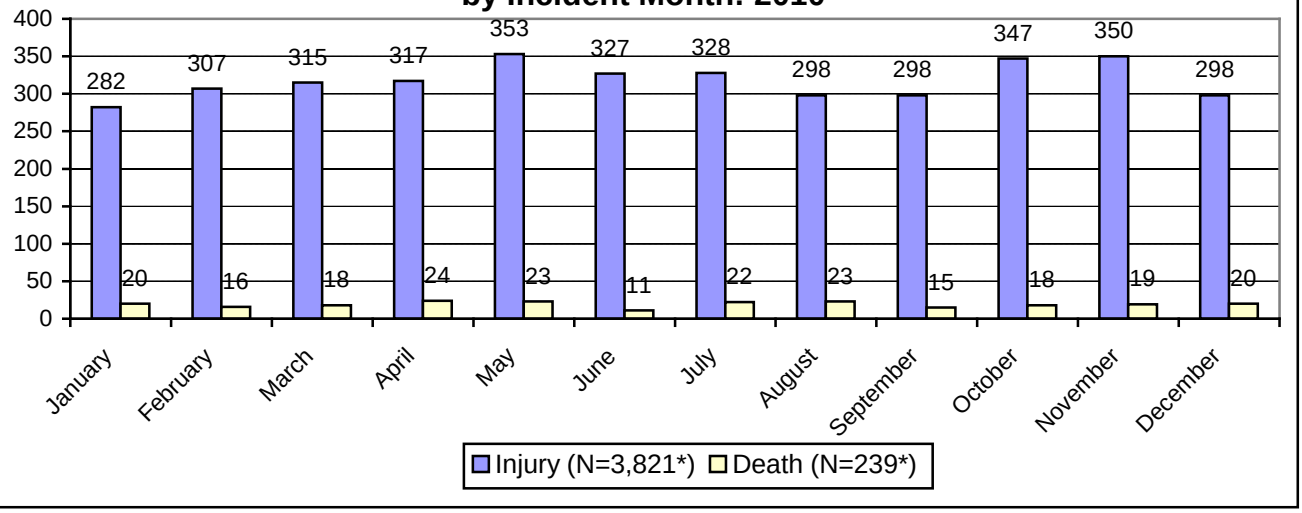
Figure 3.9: Transportation Related Injuries and Deaths by Incident Day of Week: 2010



*One injury and ten deaths had unspecified incident dates
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

The number of injuries and deaths did not fluctuate greatly over the course of the year, although injuries were highest in May (353) and lowest in January (282). The highest number of deaths was in April (24) and the lowest in June (11).

Figure 3.10: Transportation Related Injuries and Deaths by Incident Month: 2010

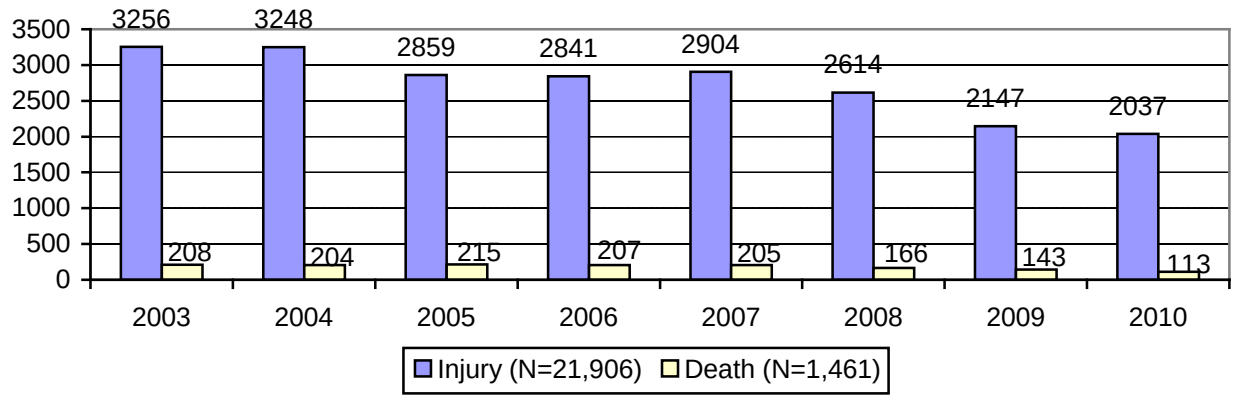


*Three injuries and seven deaths had unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Motor Vehicle Occupant Crash Injuries

Motor vehicle occupants are drivers or passengers of enclosed vehicles, such as cars, trucks, and vans. From 2003 to 2010, the number injuries and deaths to motor vehicle occupants dropped by 37% and 46%, respectively. The injury and death rates, accounting for the size of the population during this time, declined by 42% and 50%.

Figure 3.11: Motor Vehicle Occupant Crash Injuries and Deaths by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

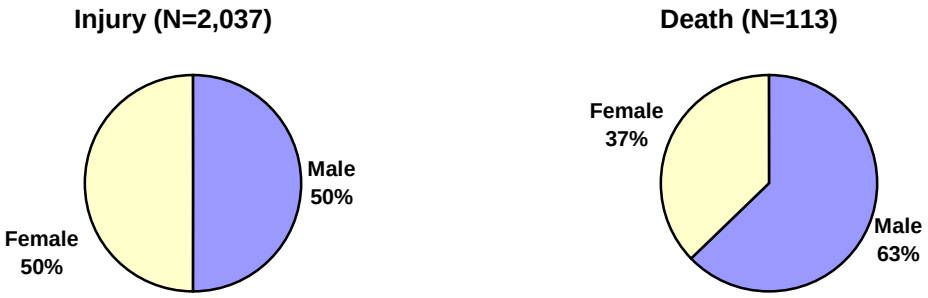
Table 3.3: Number and Rate (per 100,000) of Motor Vehicle Occupant Injuries and Deaths by Year: 2003 - 2010

	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	3,256	109.94	208	7.02	3,464	116.96
2004	3,248	107.65	204	6.76	3,452	114.41
2005	2,859	93.70	215	7.05	3,074	100.74
2006	2,841	92.64	207	6.75	3,048	99.39
2007	2,904	93.73	205	6.62	3,109	100.35
2008	2,614	83.08	166	5.28	2,780	88.36
2009	2,147	67.66	143	4.51	2,290	72.16
2010	2,037	63.33	113	3.51	2,150	66.85
Total	**21,906**	**88.58**	**1,461**	**5.91**	**23,367**	**94.48**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

In 2010, Non-fatal MVO injuries were evenly split between men and women, while men accounted for 63% of deaths.

Figure 3.12: Motor Vehicle Occupant Crash Injuries and Deaths by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Injury rates were highest in the 20 to 24 year age group (131 per 100,000), and death rates were highest among those 85 years of age and older (17 per 100,000).

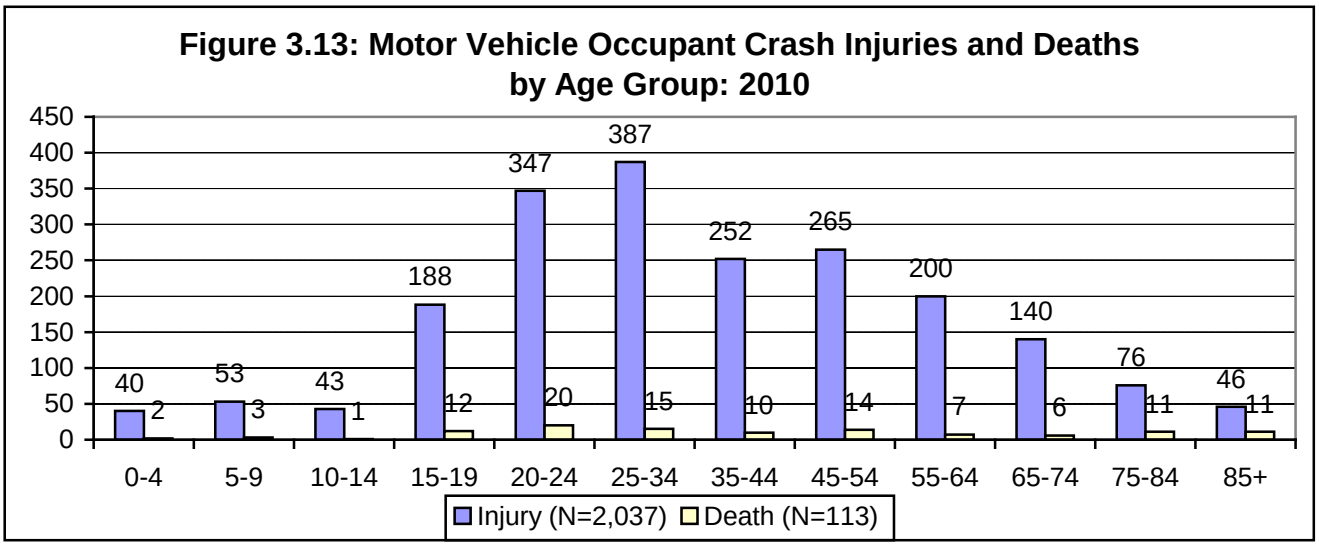
Table 3.4: Number and Rate* (per 100,000) of Motor Vehicle Occupant Crash Injuries and Deaths by Age Group and Gender: 2010

	Injury						Death							
	Male		Female		Total		Male		Female		Total		Overall Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	19	16.20	21	18.44	40	17.31	1	*	1	*	2	*	42	18.17
5-9	26	24.38	27	26.09	53	25.22	1	*	2	*	3	*	56	26.65
10-14	18	18.27	25	25.10	43	21.70	0	*	1	*	1	*	44	22.21
15-19	97	78.88	91	78.86	188	78.87	5	4.07	7	6.07	12	5.03	200	83.91
20-24	183	126.87	163	135.53	347	131.19	15	10.40	5	4.16	20	7.56	367	138.75
25-34	202	84.67	185	84.67	387	84.67	9	3.77	6	2.75	15	3.28	402	87.95
35-44	126	55.41	126	56.03	252	55.72	8	3.52	2	*	10	2.21	262	57.93
45-54	131	58.70	134	57.98	265	58.34	6	2.69	8	3.46	14	3.08	279	61.42
55-64	101	61.85	99	56.05	200	58.84	6	3.67	1	*	7	2.06	207	60.89
65-74	62	72.05	78	76.83	140	74.64	4	*	2	*	6	3.20	146	77.84
75-84	33	61.78	43	59.28	76	60.34	6	11.23	5	6.89	11	8.73	87	69.07
85+	20	81.58	26	64.09	46	70.68	9	36.71	2	*	11	16.90	57	87.58
Total	**1,018**	**63.39**	**1,018**	**62.90**	**2,037**	**63.17**	**71**	**4.42**	**42**	**2.60**	**113**	**3.50**	**2,150**	**66.68**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population estimates, SANDAG
*Rates not calculated on fewer than five incidents
Note: total includes one death with unspecified age.

As illustrated in figure 3.13, more than half of injuries and deaths due to motor vehicle occupant (MVO) crashes are to younger adults (ages 15-44). During 2010, 58% of injuries and 50% of deaths due to MVO crashes occurred to individuals between 15 and 44 years of age.

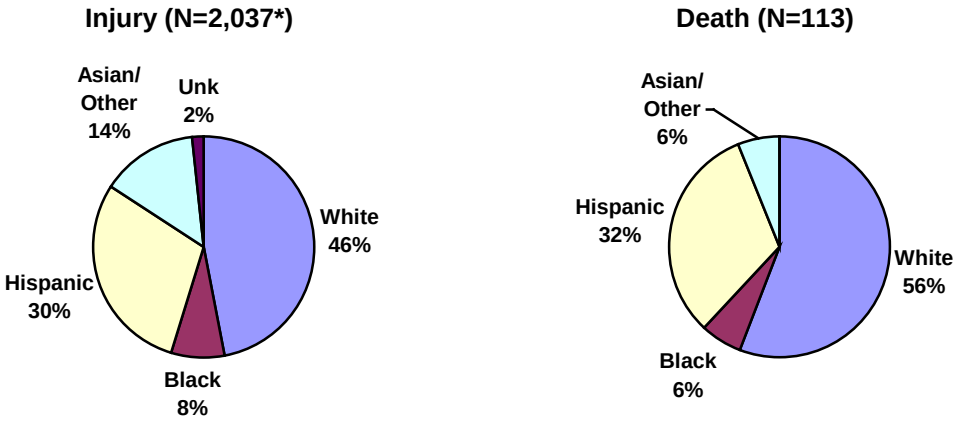
Figure 3.13: Motor Vehicle Occupant Crash Injuries and Deaths by Age Group: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: total includes one death with unspecified age.

The distribution of MVO injuries and deaths by race/ethnicity was actually quite similar to the distribution of these groups within the overall population. Whites made up a slightly higher proportion of deaths than the population (56% vs. 49%), but a smaller percentage of injuries (46% vs. 49%).

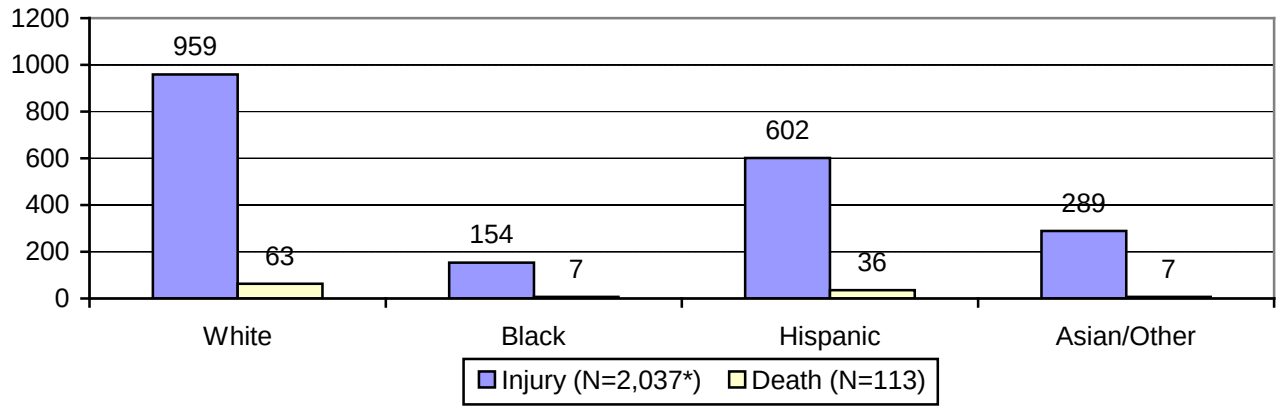
Figure 3.14: Motor Vehicle Occupant Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include 33 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010

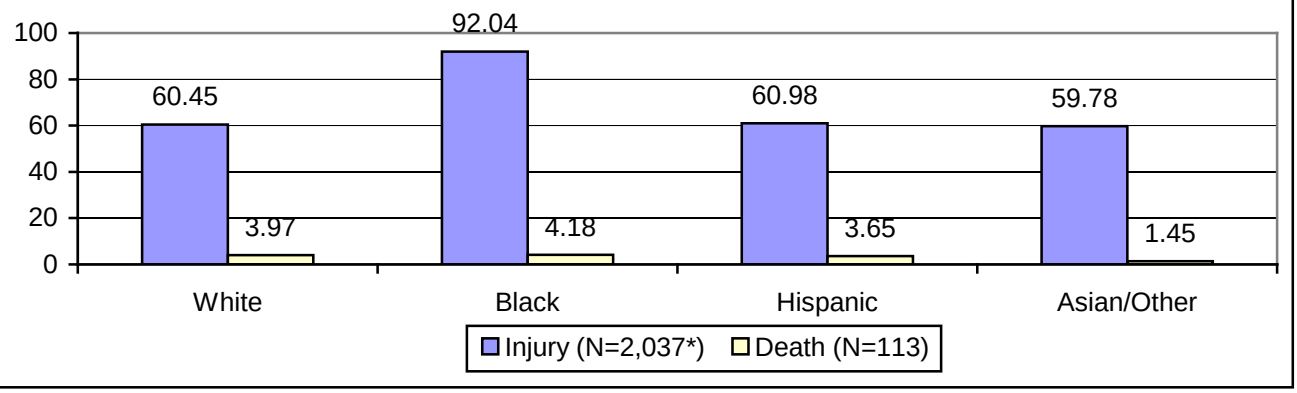
In 2010, while whites accounted for nearly half of injuries and deaths due to MVO crashes, the injury rate was highest in the black population.

Figure 3.15: Motor Vehicle Occupant Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include 33 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

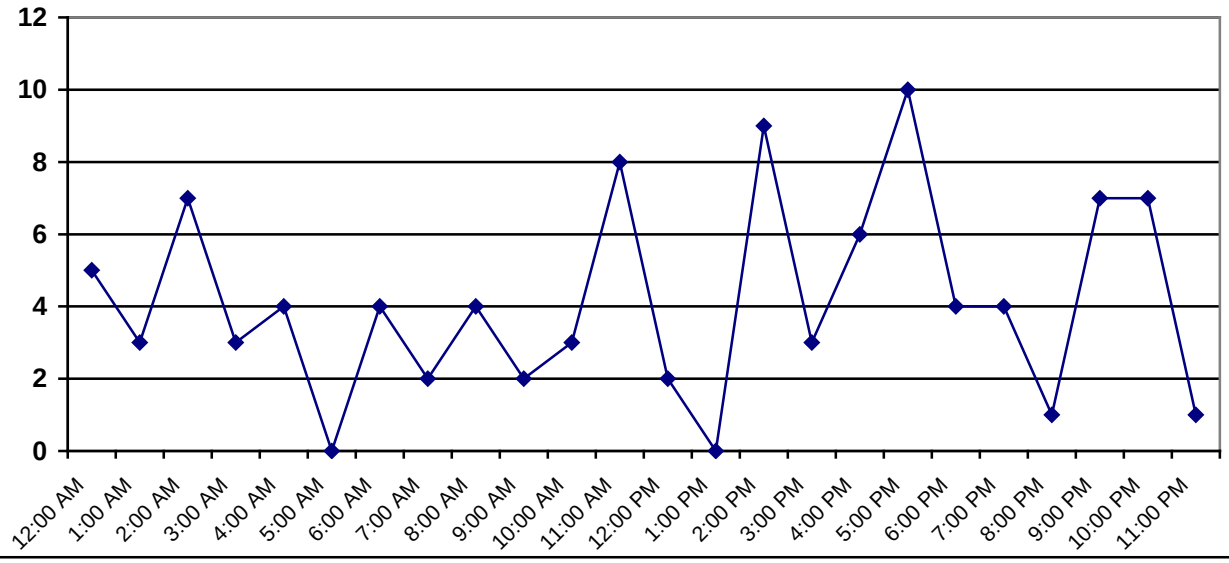
Figure 3.16: Motor Vehicle Occupant Crash Injury and Death Rates by Race/Ethnicity: 2010



*Totals include 33 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

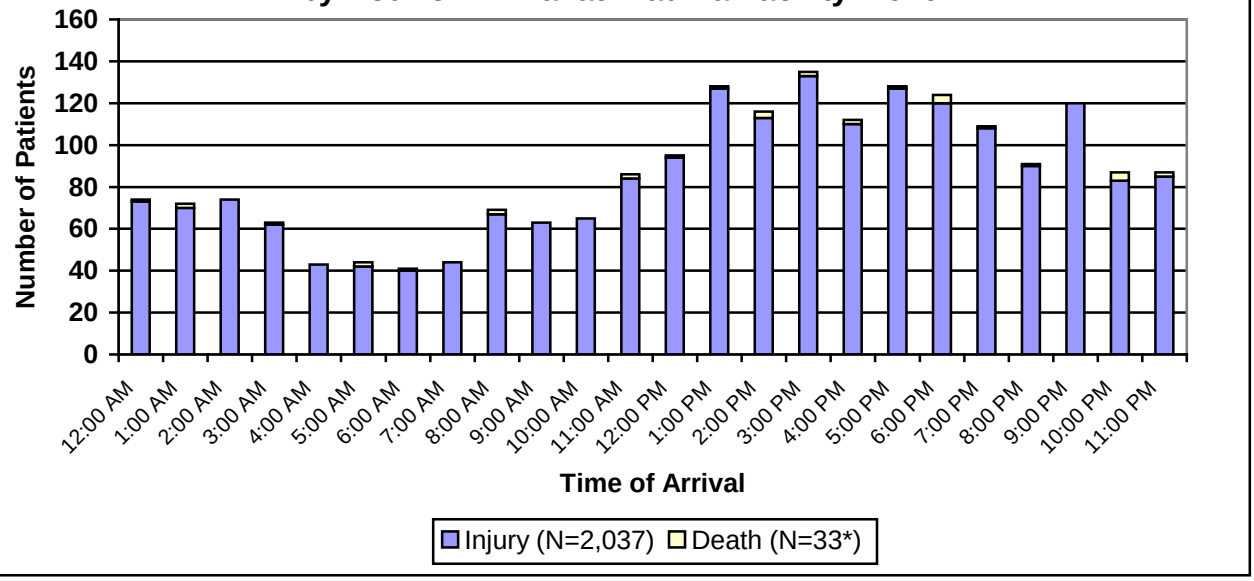
The peak hour for fatal MVO crashes was between 5:00 and 6:00 p.m. The number of trauma patients admitted to trauma facilities was highest between 3:00 and 4:00 pm.

Figure 3.17: Motor Vehicle Occupant Crash Deaths* by Known Time of Injury: 2010



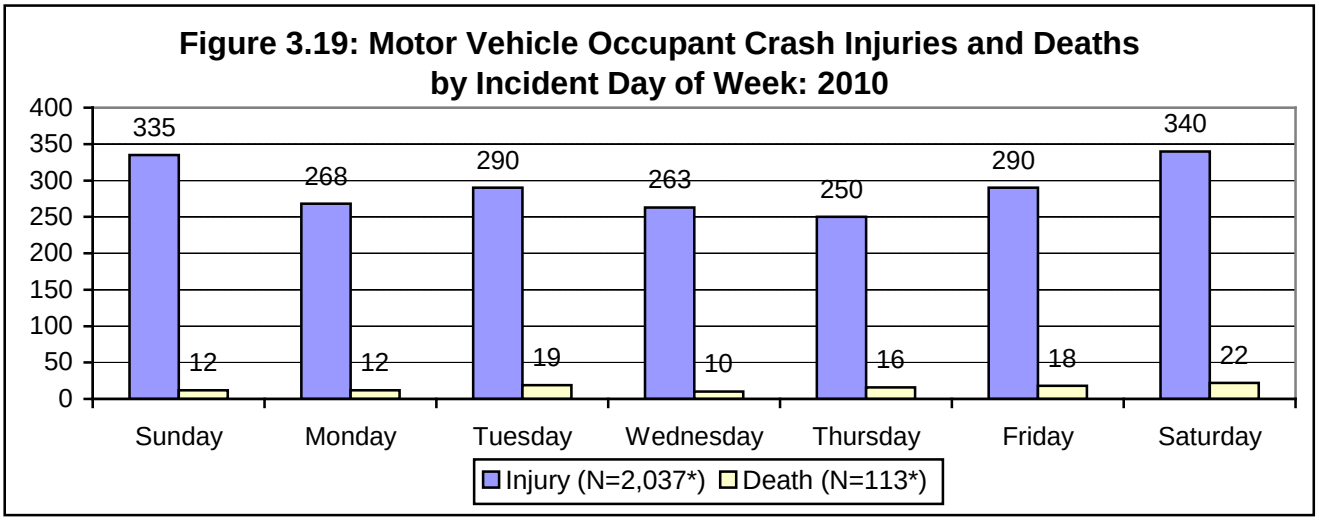
All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*There were 14 deaths with an unidentified time of injury
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Medical Examiner's Data, 2010

Figure 3.18: Motor Vehicle Occupant Crash Injuries and Deaths by Hour of Arrival at Trauma Facility: 2010

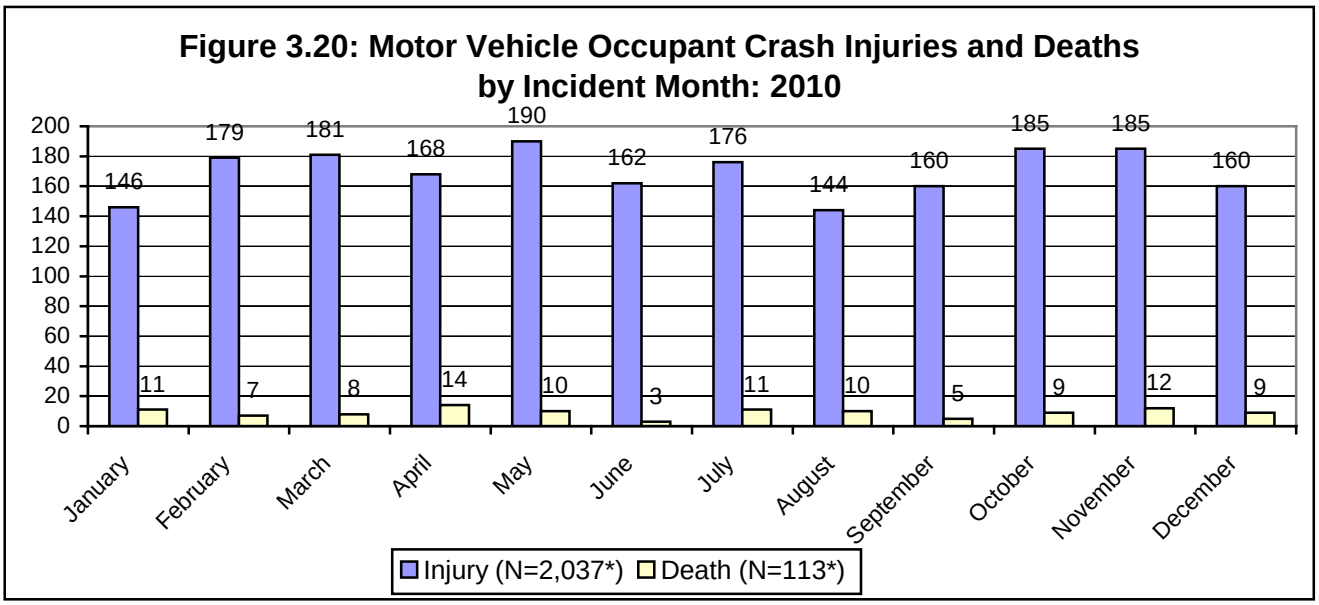


All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene or at non-trauma facilities not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

In 2010, motor vehicle occupant crash injuries were highest on weekends, with Saturday and Sunday making up 33% of injuries. One-fifth of deaths occurred on Saturdays. The month with the highest number of MVO injuries was May, while April had the highest number of deaths.



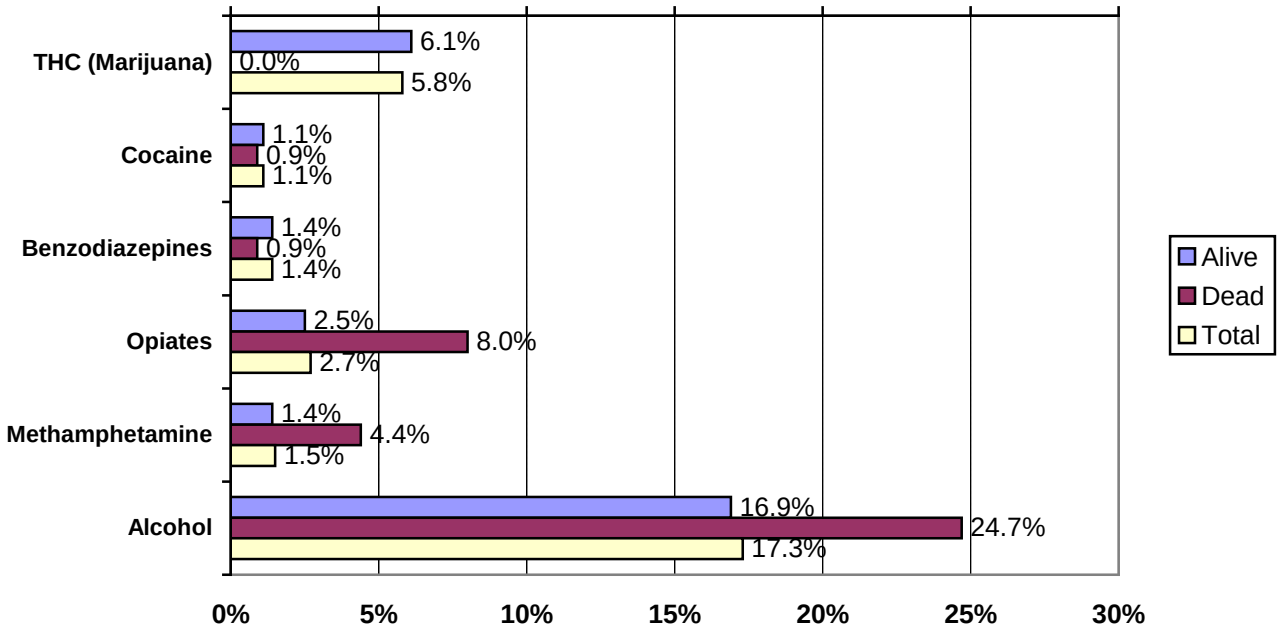
*Totals include one injury and four deaths with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010



*Totals include one injury and four deaths with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

One quarter of MVO deaths, and 17% overall had positive toxicologies for alcohol. Methamphetamine and opiates were also higher in individuals who died than in survivors. The medical examiner's laboratory does not quantify cannabinoid levels, which may explain the lack of positive THC findings.

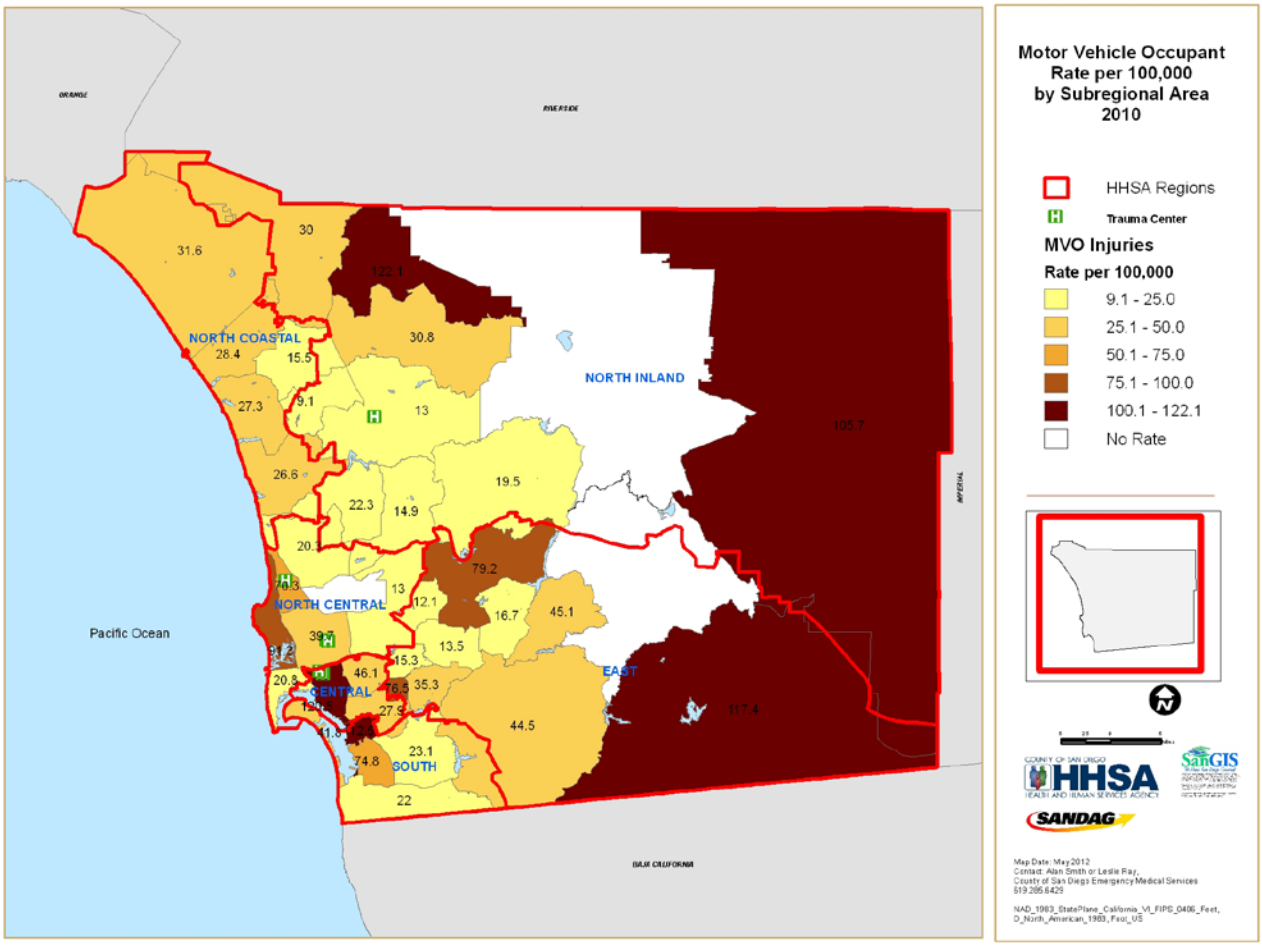
Figure 3.21: Motor Vehicle Occupant Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 56% of non-fatal and 88% of fatal MVO injuries. The highest rate of MVO injuries and deaths were in the SRAs of Central San Diego and National City. At the HHSA Region level, the highest combined rate was in the Central HHSA region (66.2 per 100,000). Population estimates for each of the HHSA regions can be found in Appendix B.

Figure 3.22: Motor Vehicle Occupant Crash Injury and Death Rates per 100,000 by Subregional Area, 2010



Please note there were 901 injuries and 13 deaths with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data: 2010; Population estimates, SANDAG.

Table 3.5: Motor Vehicle Occupant Injuries and Deaths by Incident HHSA Region: 2010

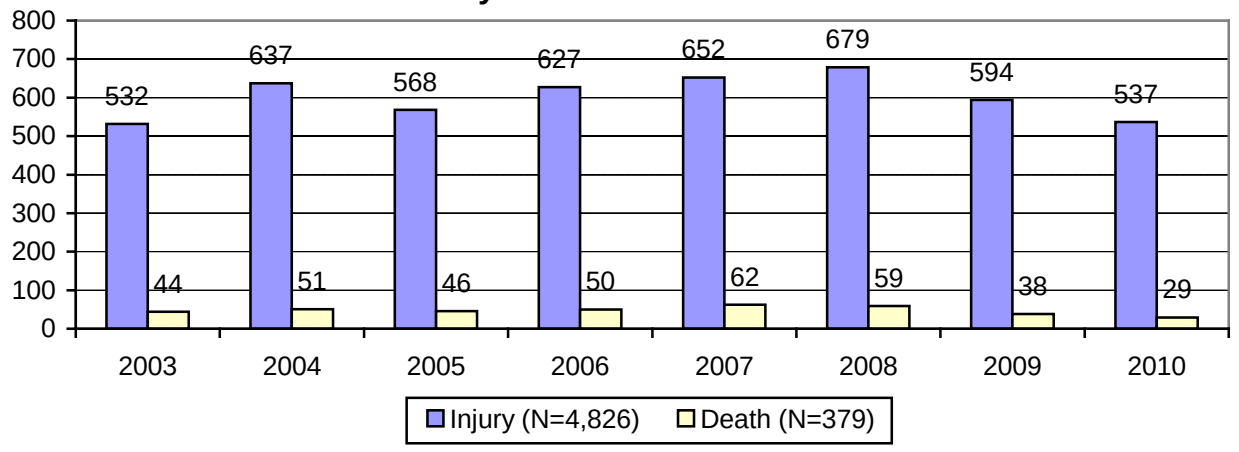
HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	131	25.28	11	2.12	142	27.40
North Central	233	37.55	15	2.42	248	39.97
Central	319	62.50	19	3.72	338	66.22
South	236	45.92	10	1.95	246	47.86
East	124	23.76	26	4.98	150	28.74
North Inland	93	17.24	19	3.52	112	20.76
Unknown	901	--	13	--	914	--
Total	**2,037**	**63.17**	**113**	**3.50**	**2,150**	**66.68**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Motorcycle Crash Injuries

The number of motorcyclists injured and killed was fairly stable from 2004 through 2008. From 2008 to 2010, though, the number of injuries fell by 21% and the number of deaths dropped to half of the 2008 level. More encouraging news is that deaths as a proportion of patients plus on-scene fatalities fell from 7.6% in 2003 to 5.1% in 2010.

Figure 3.23: Motorcycle Crash Injuries and Deaths by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

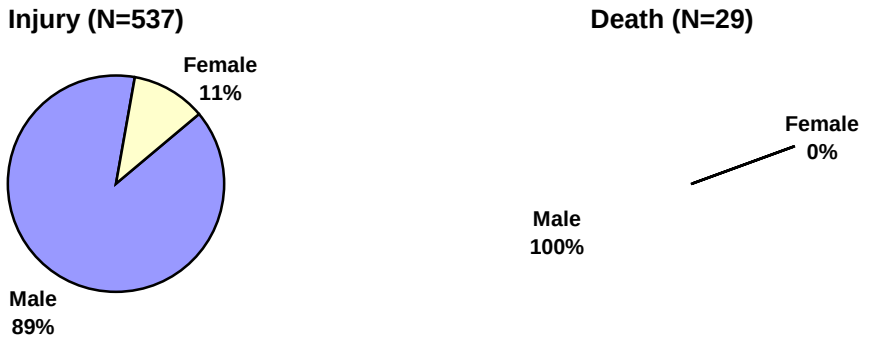
Table 3.6: Number and Rate (per 100,000) of Motorcycle Crash Injuries and Deaths by Year: 2003 - 2010

	Injury		Death		Total	
Year	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	532	17.96	44	1.49	576	19.45
2004	637	21.11	51	1.69	688	22.80
2005	568	18.62	46	1.51	614	20.12
2006	627	20.44	50	1.63	677	22.07
2007	652	21.04	62	2.00	714	23.05
2008	679	21.58	59	1.88	738	23.46
2009	594	18.72	38	1.20	632	19.92
2010	537	16.70	29	0.90	566	17.60
Total	**4,826**	**19.51**	**379**	**1.53**	**5,205**	**21.05**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

The majority of people who were injured or killed in motorcycle crashes were male (89% of injuries and 100% of deaths). The highest rate of injury was in males 20-24 years of age (67 per 100,000). The highest death rate was in the 45-54 year old men (4.9 per 100,000).

Figure 3.24: Motorcycle Crash Injuries and Deaths by Gender: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010

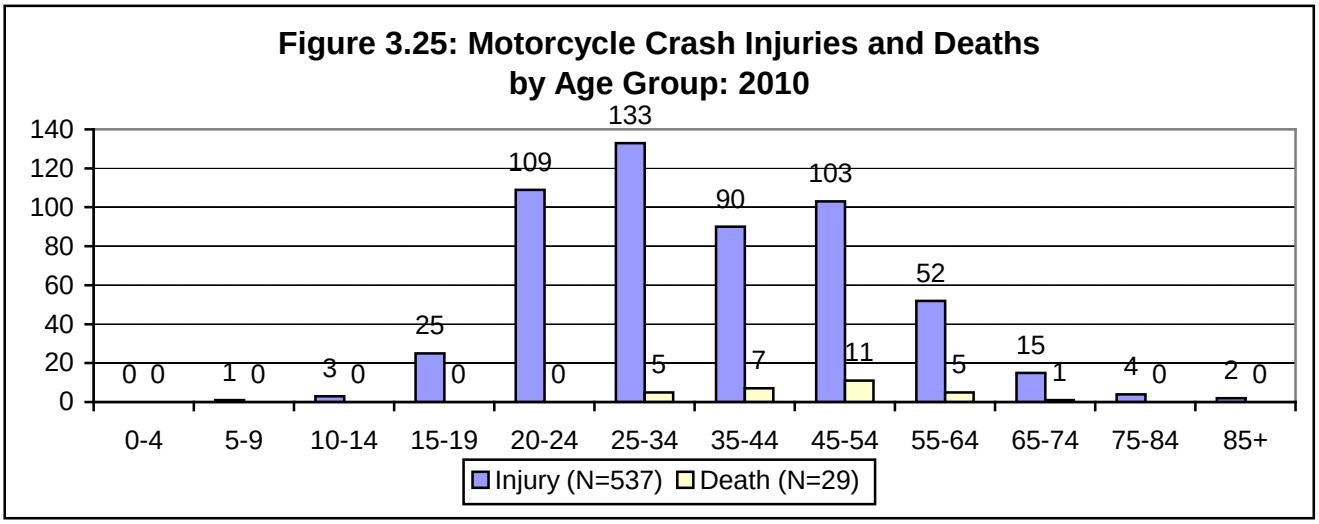
Table 3.7: Number and Rate* (per 100,000) of Motorcycle Crash Injuries and Deaths by Age Group and Gender: 2010

	Injury						Death							
	Male		Female		Total		Male		Female		Total		Overall Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	0	*	0	*	0	*	0	*	0	*	0	*	0	*
5-9	1	0.94	0	*	1	0.48	0	*	0	*	0	*	1	0.48
10-14	2	2.03	1	1.00	3	1.51	0	*	0	*	0	*	3	1.51
15-19	21	17.08	4	3.47	25	10.49	0	*	0	*	0	*	25	10.49
20-24	97	67.25	12	9.98	109	41.21	0	*	0	*	0	*	109	41.21
25-34	125	52.39	8	3.66	133	29.10	5	2.10	0	*	5	1.09	138	30.19
35-44	76	33.42	14	6.23	90	19.90	7	3.08	0	*	7	1.55	97	21.45
45-54	86	38.54	17	7.36	103	22.67	11	4.93	0	*	11	2.42	114	25.10
55-64	48	29.39	4	2.26	52	15.30	5	3.06	0	*	5	1.47	57	16.77
65-74	15	17.43	0	*	15	8.00	1	*	0	*	1	*	16	8.53
75-84	4	7.49	0	*	4	3.18	0	*	0	*	0	*	4	3.18
85+	2	8.16	0	*	2	3.07	0	*	0	*	0	*	2	3.07
Total	**477**	**29.70**	**60**	**3.71**	**537**	**16.65**	**29**	**1.81**	**0**	**0.00**	**29**	**0.90**	**566**	**17.55**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population estimates, SANDAG.
*Rates not calculated on fewer than five incidents

Although 20 to 24 year olds have the highest rates of motorcycle crash injury, there are large numbers of injuries occurring into the mid 50s, and sporadic cases in the elderly as well.

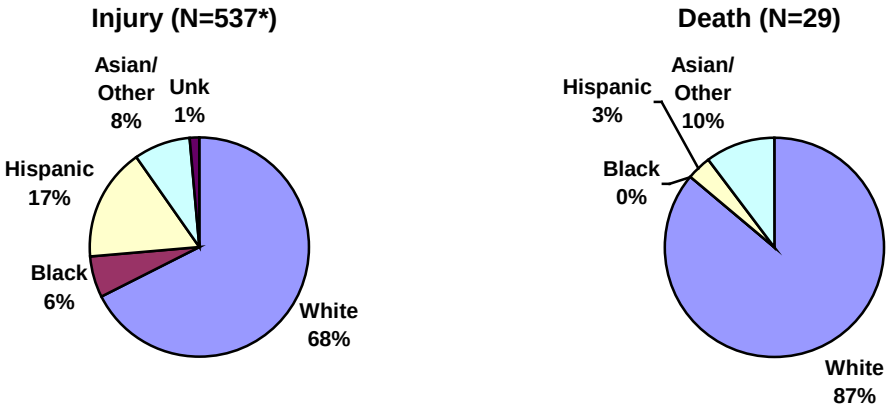
Figure 3.25: Motorcycle Crash Injuries and Deaths by Age Group: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Whites were substantially over-represented among injuries and deaths from motorcycle crashes, with 68% of injuries and 87% of deaths, despite comprising only 49% of the population overall.

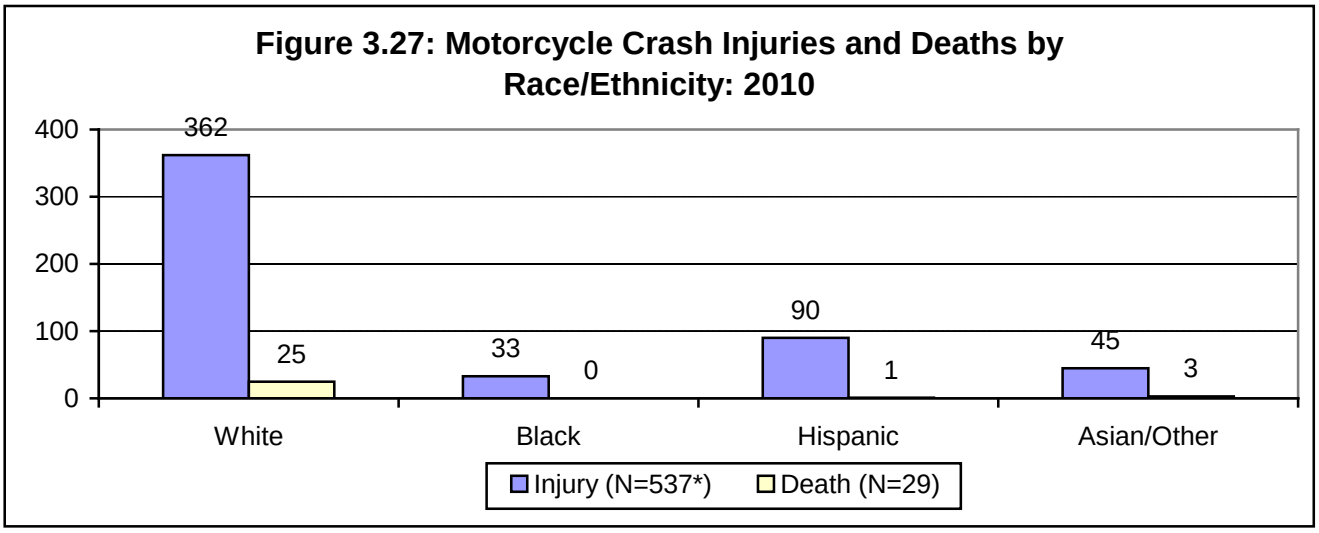
Figure 3.26: Motorcycle Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include 7 injuries of unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010

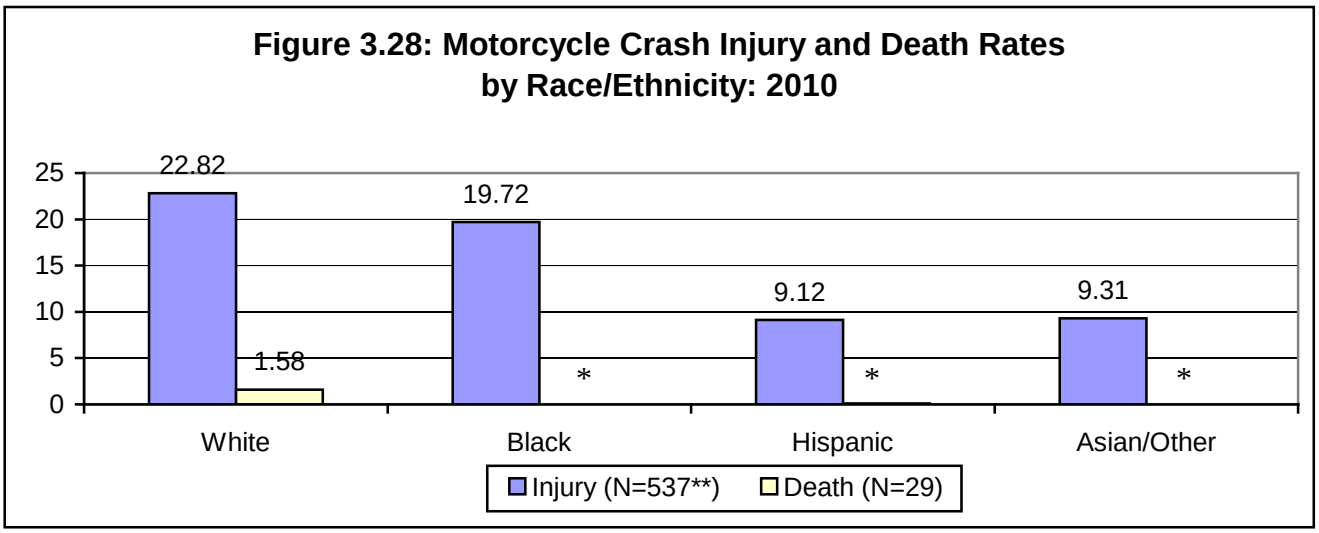
During 2010, the white population had the highest incidence and rate of deaths and severe injuries due to motorcycle crashes. The injury rate in the black population was close behind at 19.7 per 100,000.

Figure 3.27: Motorcycle Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include 7 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

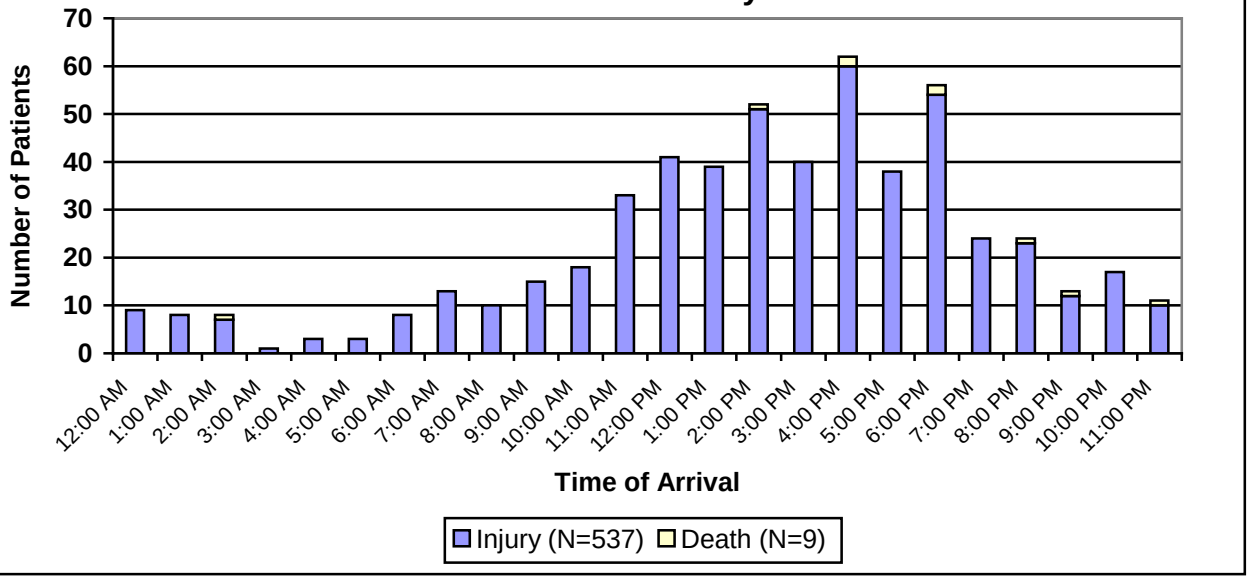
Figure 3.28: Motorcycle Crash Injury and Death Rates by Race/Ethnicity: 2010



*Rates not calculated on fewer than five incidents
**Totals include 7 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Injured motorcyclists were most likely to arrive at trauma centers in the afternoon and early evening hours; 60% arrived between noon and 7 pm.

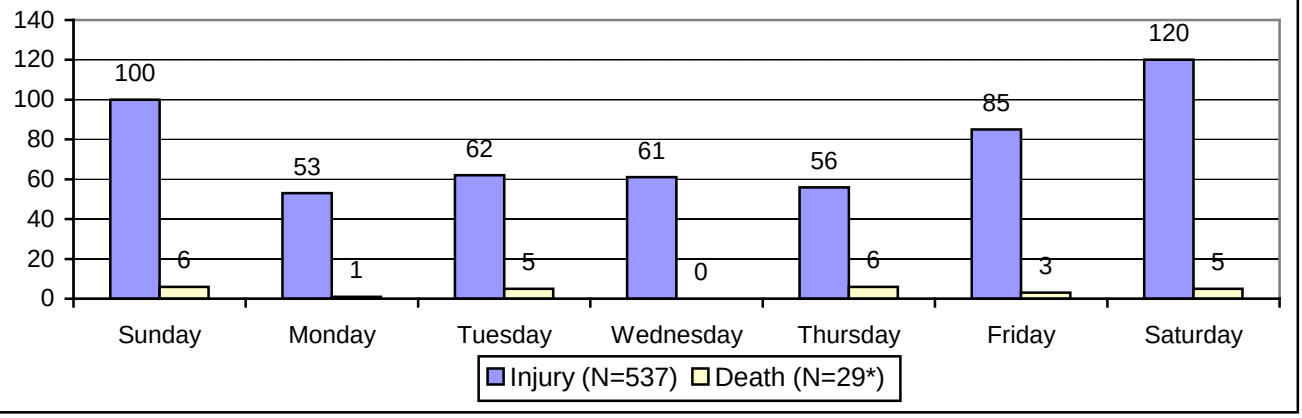
Figure 3.29: Motorcycle Crash Injuries and Deaths by Hour of Arrival at Trauma Facility: 2010



All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene or at non-trauma facilities not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

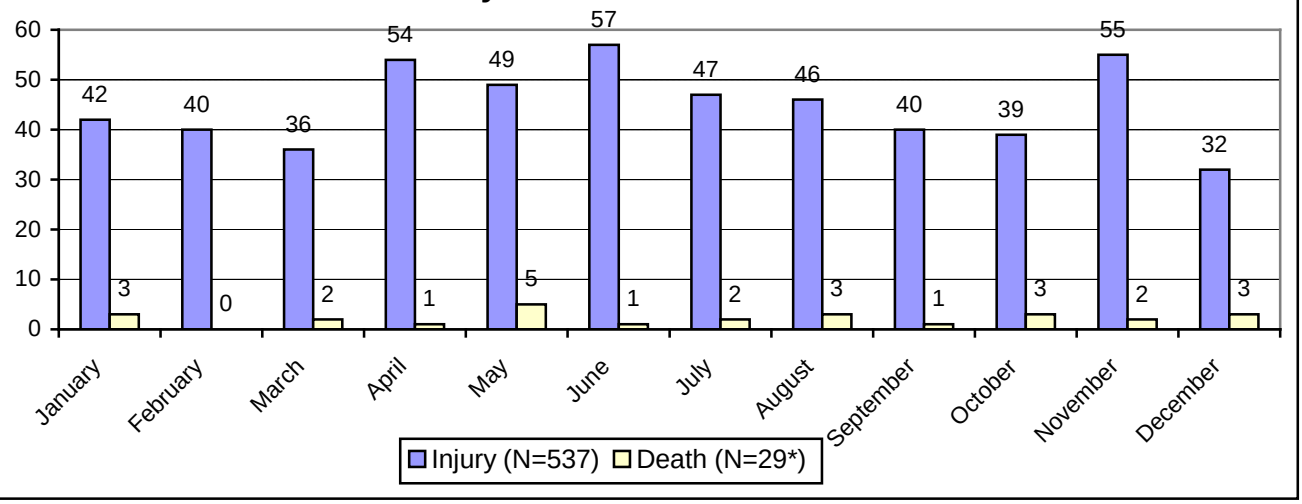
Forty one percent of injuries and 42% of motorcyclist deaths occurred on Saturdays and Sundays. The springtime months of April through June had the highest number of injuries (30% of total).

Figure 3.30: Motorcycle Crash Injuries and Deaths by Incident Day of Week: 2010



*Incident data was not documented for three deaths
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

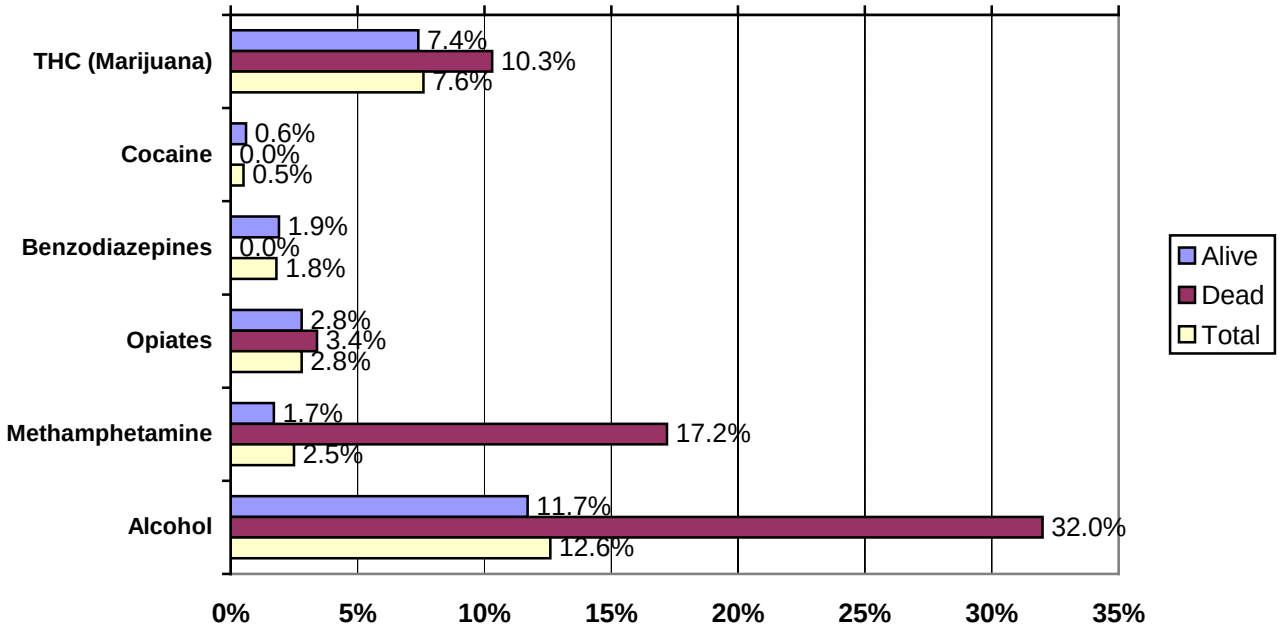
Figure 3.31: Motorcycle Crash Injuries and Deaths by Incident Month: 2010



*Incident data was not documented for three deaths
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Overall, 12.6% of motorcycle crash victims tested positive for alcohol, followed by 7.6% positive for marijuana. Other substances were positive in less than five percent of motorcyclists.

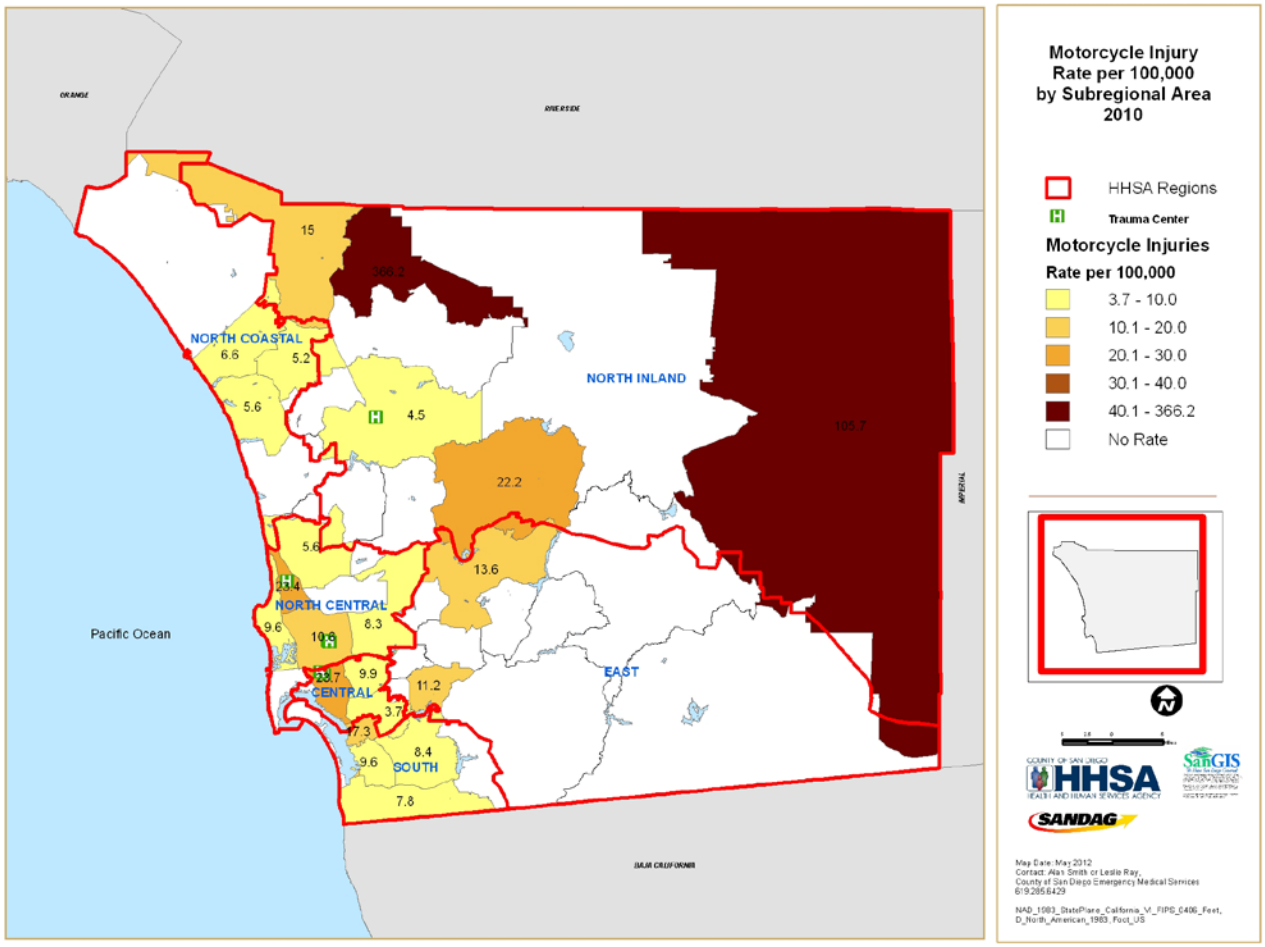
Figure 3.32: Motorcycle Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 50% of non-fatal and 83% of fatal motorcycle injuries. Pauma and Anza-Borrego Springs had the highest rates of injuries to motorcyclists. It is important to keep in mind, though, that this rate is calculated based on the location of the incident; residence-based rates are higher in Lakeside and Spring Valley. At the HHSA Region level, the highest combined rate was in the Central HHSA region (12.7 per 100,000). Population estimates for each of the HHSA regions can be found in Appendix B.

Figure 3.33: Motorcycle Crash Injury and Death Rates per 100,000 by Subregional Area: 2010



Please note there were 269 injuries and five deaths with unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 3.8: Motorcycle Crash Injuries and Deaths by Incident HHSA Region, 2010

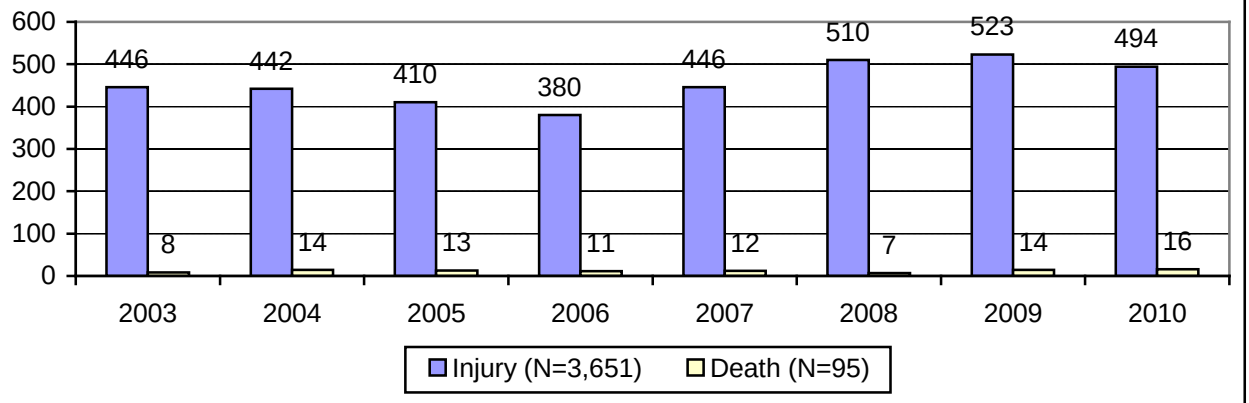
HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	30	5.79	1	*	31	5.98
North Central	51	8.22	4	*	55	8.86
Central	62	12.15	3	*	65	12.74
South	45	8.76	2	*	47	9.14
East	26	4.98	5	0.96	31	5.94
North Inland	53	9.82	9	1.67	62	11.49
Unknown	270	--	5	--	275	--
Total	**537**	**16.65**	**29**	**0.90**	**566**	**17.55**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Pedalcycle Crash Injuries

The ratio of deaths to non-fatal pedalcycle injuries was much lower than for other causes of injury. Compared to the ratio for all causes of injury, in which there was eleven nonfatal trauma victims for every death, the ratio for pedalcyclists during 2010 was 31 nonfatal injuries per death.

Figure 3.34: Pedalcycle Crash Injuries and Deaths by Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

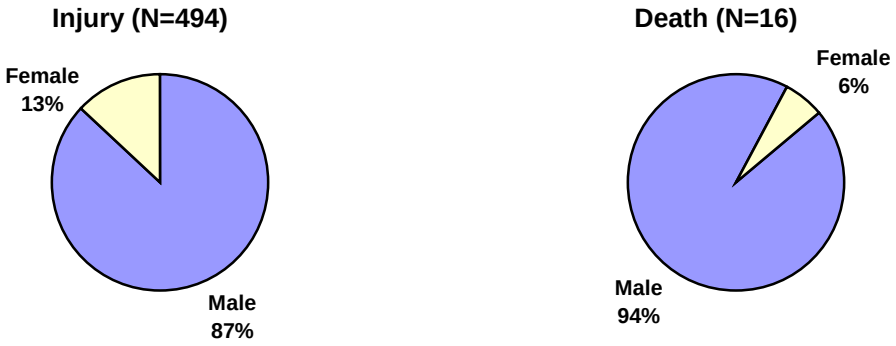
Table 3.9: Number and Rate (per 100,000) of Pedalcycle Crash Injuries and Deaths by Year: 2003 - 2010

Year	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	446	15.06	8	0.27	454	15.33
2004	442	14.65	14	0.46	456	15.11
2005	410	13.44	13	0.43	423	13.86
2006	380	12.39	11	0.36	391	12.75
2007	446	14.40	12	0.39	458	14.78
2008	510	16.21	7	0.22	517	16.43
2009	523	16.48	14	0.44	537	16.92
2010	494	15.36	16	0.50	510	15.86
Total	**3,651**	**14.76**	**95**	**0.38**	**3,746**	**15.15**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

Injuries and deaths related to pedalcycle crashes were much more likely to happen to males than females. The highest age and sex-specific injury rate was in 10 to 14 year old boys (47.7 per 100,000).

Figure 3.35: Pedalcycle Crash Injuries and Deaths by Gender: 2010



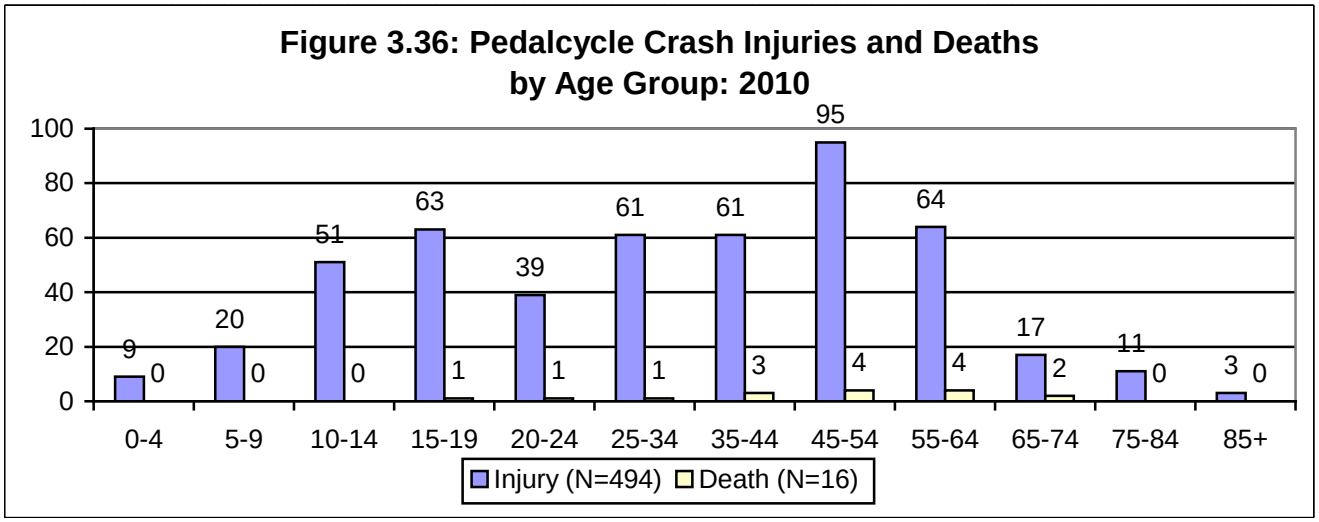
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Table 3.10: Number and Rate* (per 100,000) of Pedalcycle Crash Injuries by Age Group and Gender: 2010

	Male		Female		Total	
Age Group	Number	Rate	Number	Rate	Number	Rate
0-4	5	4.26	4	*	9	3.89
5-9	18	16.88	2	*	20	9.52
10-14	47	47.71	4	*	51	25.74
15-19	54	43.91	9	7.80	63	26.43
20-24	31	21.49	8	6.65	39	14.74
25-34	50	20.96	11	5.03	61	13.35
35-44	54	23.75	7	3.11	61	13.49
45-54	83	37.19	12	5.19	95	20.91
55-64	59	36.13	5	2.83	64	18.83
65-74	15	17.43	2	*	17	9.06
75-85	11	20.59	0	*	11	8.73
85+	2	*	1	*	3	*
Total	**429**	**26.71**	**65**	**4.02**	**494**	**15.32**

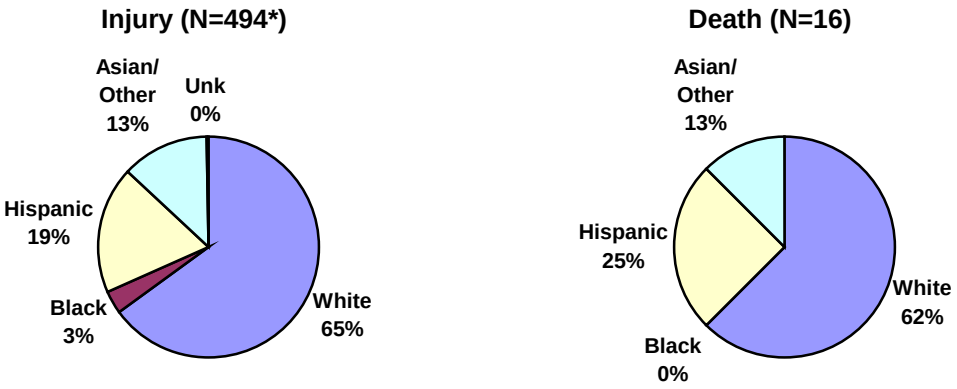
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population estimates, SANDAG
*Rates not calculated on fewer than five incidents

While the highest injury rates were seen in boys between 10 and 14 years of age, 13 of the 16 people who died in pedalcycle crashes (81%) were 35 years of age or older.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

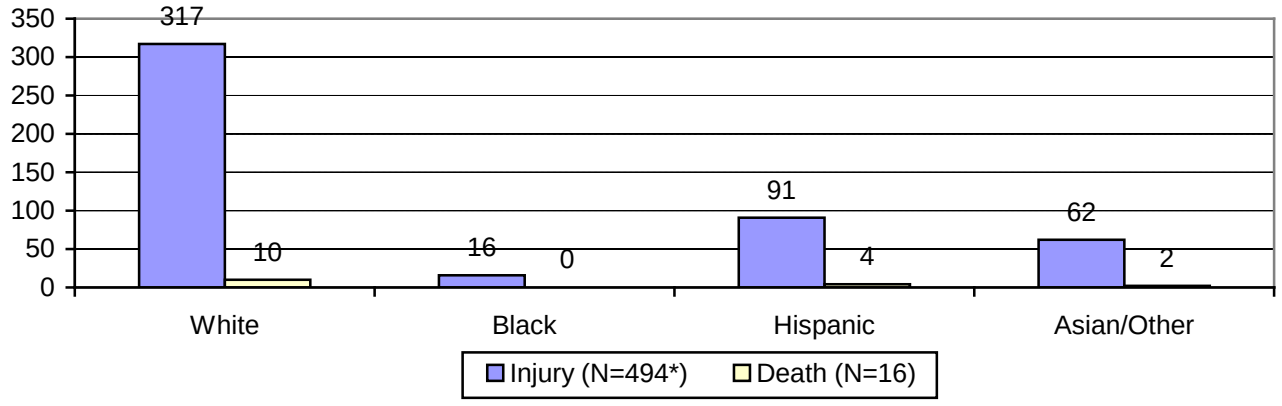
Figure 3.37: Pedalcycle Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include eight injuries with unspecified race/ethnicity
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

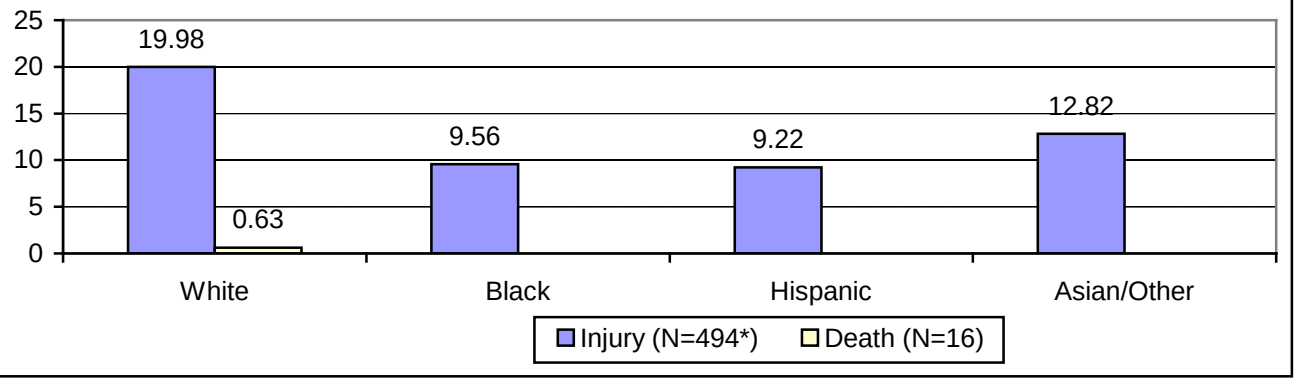
Rates of pedalcycle crash injury were highest among whites (20 per 100,000), followed by Asian/other race/ethnicities.

Figure 3.38: Pedalcycle Crash Injuries and Deaths by Race/Ethnicity: 2010



*Totals include eight injuries with unspecified race/ethnicity
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

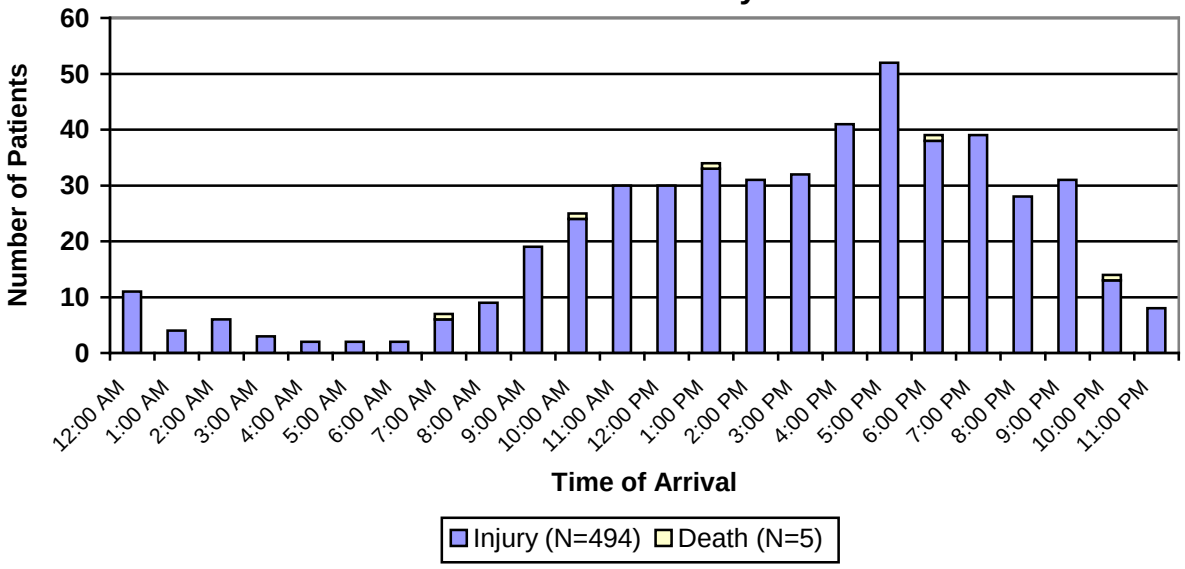
Figure 3.39: Pedalcycle Crash Injury and Death Rates by Race/Ethnicity: 2010



*Totals include eight injuries with unspecified race/ethnicity
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Similar to motorcyclist injuries, pedalcyclists arrived at trauma centers with greatest frequency during the afternoon and early evening hours, peaking between 5 and 6 pm.

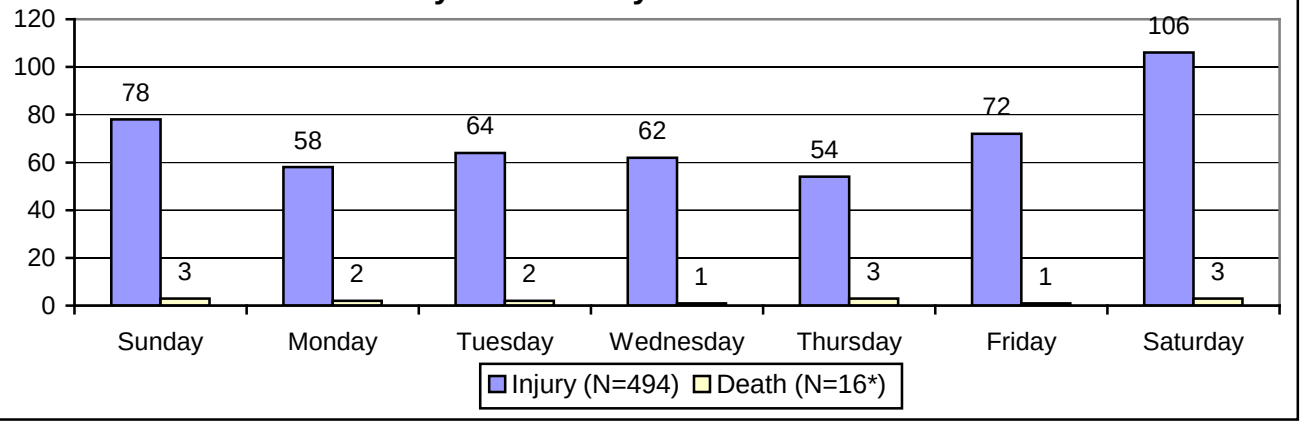
Figure 3.40: Pedalcycle Crash Injuries and Deaths by Hour of Arrival at Trauma Facility: 2010



All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene or at non-trauma facilities not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

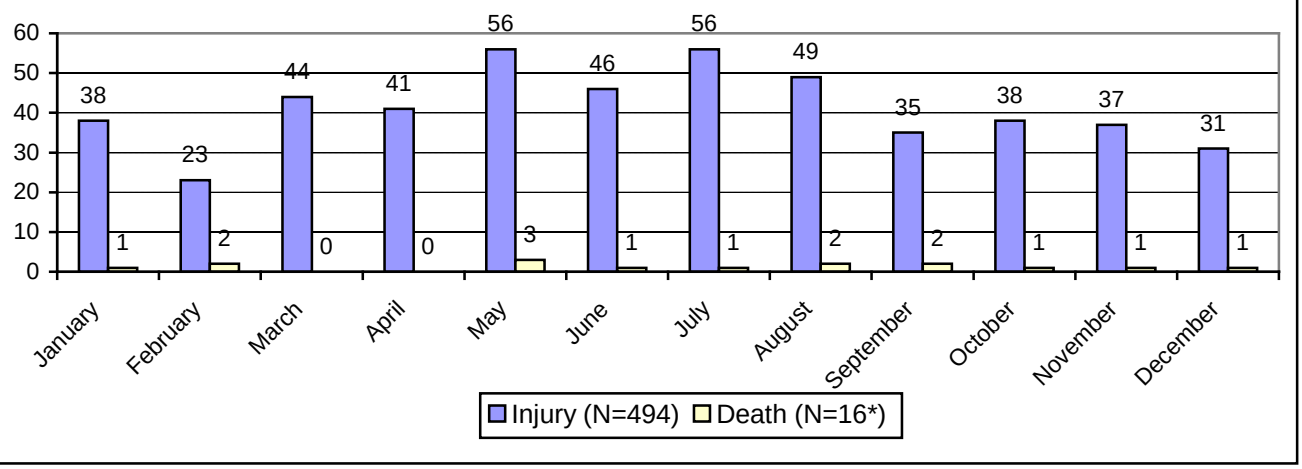
Pedalcyclists were most likely to be injured on Saturdays, while the busiest months were May and July.

Figure 3.41: Pedalcycle Crash Injuries and Deaths by Incident Day of Week: 2010



*Totals include one death with unspecified date of injury.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

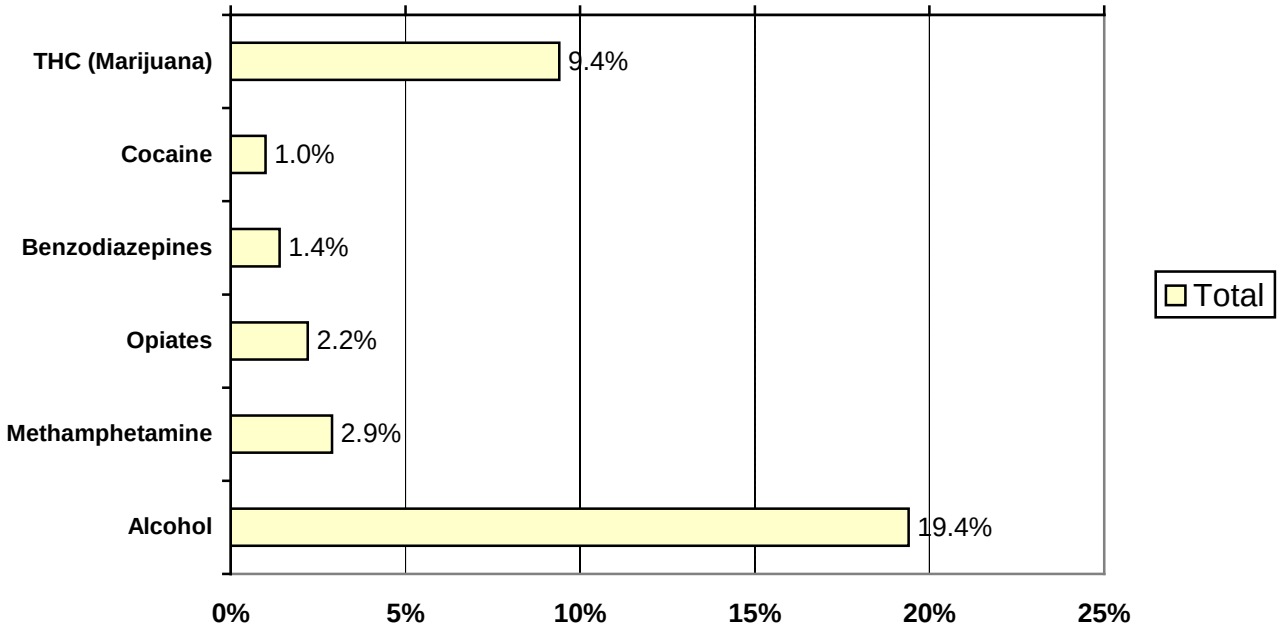
Figure 3.42: Pedalcycle Crash Injuries and Deaths by Incident Month: 2010



*Totals include one death with unspecified date of injury.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

One-fifth of injured pedalcyclists had positive alcohol toxicology results, and 9.5% tested positive for marijuana.

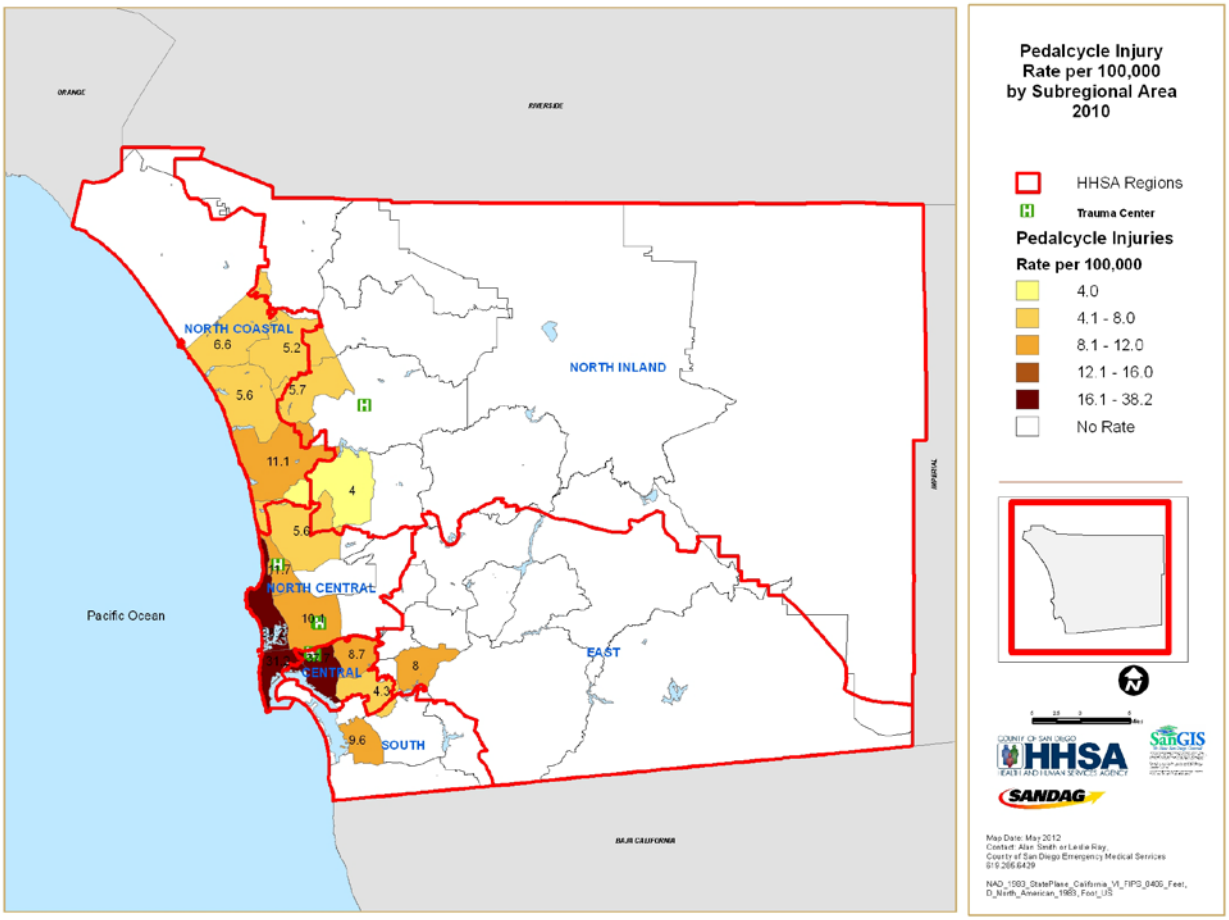
Figure 3.43: Pedalcycle Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 55% of non-fatal and 81% of fatal pedalcycle injuries. The Central, Coastal, and Peninsula SRAs had the highest rates of pedalcyclist injury. At the HHSA Region level, the Central and North Central regions had the highest rates of pedalcycle injuries (18.4 and 18.7 per 100,000 respectively). Population estimates for each of the HHSA regions can be found in Appendix B.

Figure 3.44: Pedalcycle Crash Injury and Death Rates per 100,000 by San Diego Major Statistical Area: 2010



Please note there were 224 injuries and three deaths with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 3.11: Pedalcycle Injuries and Deaths by Incident HHSA Region: 2010

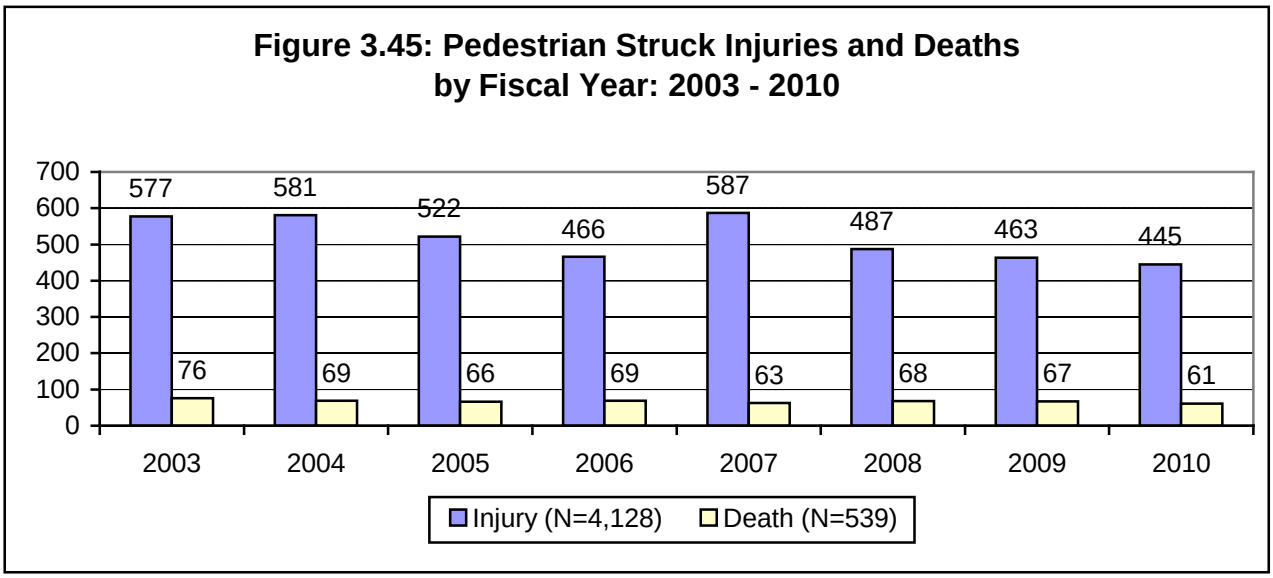
HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	26	5.02	5	0.96	31	5.98
North Central	85	13.70	2	*	87	14.02
Central	88	17.24	1	*	89	17.44
South	31	6.03	0	*	31	6.03
East	22	4.22	1	*	23	4.41
North Inland	15	2.78	4	*	19	3.52
Unknown	227		3		230	
Total	**494**	**15.32**	**16**	**0.50**	**510**	**15.82**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010
*Rates not calculated on fewer than five incidents

Pedestrian Injuries

Pedestrian injuries and deaths declined by 23% and 20%, respectively, from 2003 to 2010.

Figure 3.45: Pedestrian Struck Injuries and Deaths by Fiscal Year: 2003 - 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

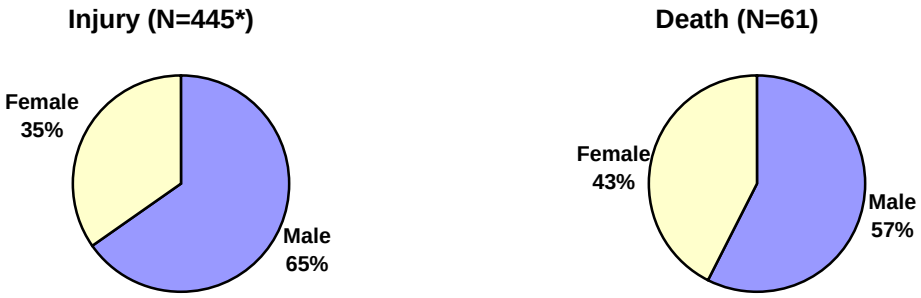
Table 3.12: Number and Rate (per 100,000) of Pedestrian Struck Injuries and Deaths by Year: 2003 - 2010

Year	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	577	19.48	76	2.57	653	22.05
2004	581	19.26	69	2.29	650	21.54
2005	522	17.11	66	2.16	588	19.27
2006	466	15.19	69	2.25	535	17.44
2007	587	18.95	63	2.03	650	20.98
2008	487	15.48	68	2.16	555	17.64
2009	463	14.59	67	2.11	530	16.70
2010	445	13.84	61	1.90	506	15.73
Total	**4,128**	**16.69**	**539**	**2.18**	**4,667**	**18.87**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

As with other transportation related injuries, males had a higher rate of death and severe injury as pedestrians compared to females for nearly all age groups. Males accounted for 65% of severe injuries and 57% of deaths. The highest injury rate was to young men between 15 and 19 years of age (35.8 per 100,000).

Figure 3.46: Pedestrian Struck Injuries and Deaths by Gender: 2010

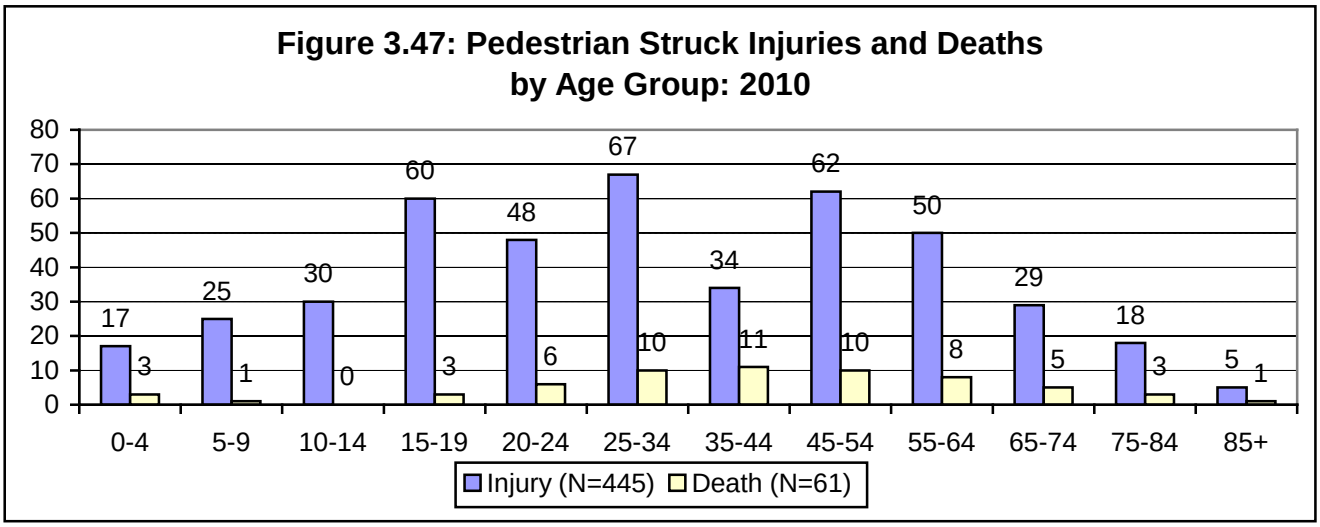


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010
*Total includes one injury with missing gender.

Table 3.13: Number and Rate* (per 100,000) of Pedestrian Struck Injuries and Deaths by Age Group and Gender: 2010

Age Group	Injury						Death							
	Male		Female		Total		Male		Female		Total		Overall Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	12	10.23	4	*	17	7.35	2	*	1	*	3	*	20	8.65
5-9	16	15.00	9	8.70	25	11.90	0	*	1	*	1	*	26	12.37
10-14	19	19.29	11	11.04	30	15.14	0	*	0	*	0	*	30	15.14
15-19	44	35.78	16	13.87	60	25.17	3	*	0	*	3	*	63	26.43
20-24	35	24.26	13	10.81	48	18.15	3	*	3	*	6	2.27	54	20.42
25-34	39	16.35	28	12.82	67	14.66	5	2.10	5	2.29	10	2.19	77	16.85
35-44	19	8.36	15	6.67	34	7.52	6	2.64	5	2.22	11	2.43	45	9.95
45-54	44	19.72	18	7.79	62	13.65	6	2.69	4	*	10	2.20	72	15.85
55-64	30	18.37	20	11.32	50	14.71	5	3.06	3	*	8	2.35	58	17.06
65-74	19	22.08	10	9.85	29	15.46	3	*	2	*	5	2.67	34	18.13
75-84	9	16.85	9	12.41	18	14.29	2	*	1	*	3	*	21	16.67
85+	4	*	1	*	5	7.68	0	*	1	*	1	*	6	9.22
Total	**290**	**18.06**	**154**	**9.52**	**445**	**13.80**	**35**	**2.18**	**26**	**1.61**	**61**	**1.89**	**506**	**15.69**

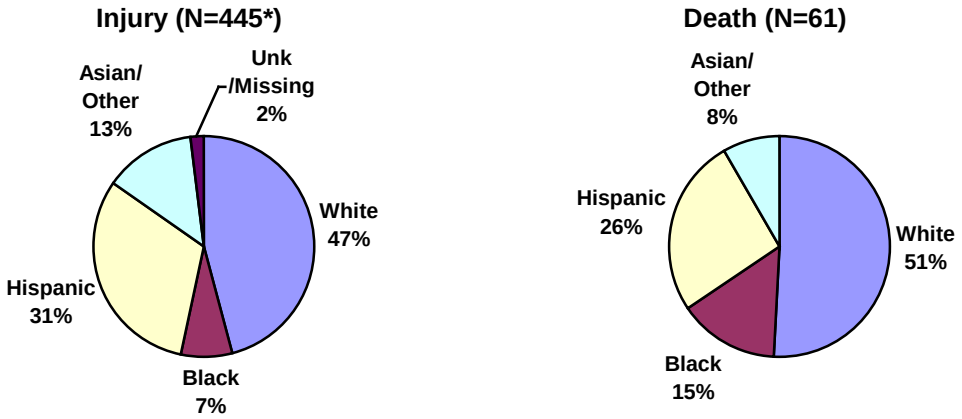
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population estimates, SANDAG
*Rates not calculated on fewer than five incidents
Note: total includes one injury with missing gender.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Pedestrian injuries were comparable to the overall population distribution of race/ethnicity. Blacks were somewhat over-represented among deaths, with 5% of the population but 15% of pedestrian deaths.

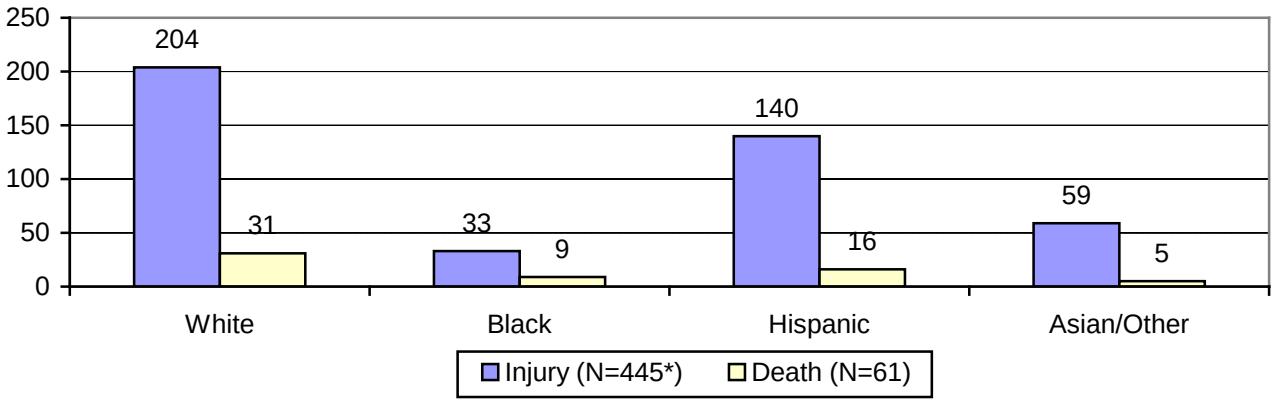
Figure 3.48: Pedestrian Struck Injuries and Deaths by Race/Ethnicity: 2010



*Totals include nine injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

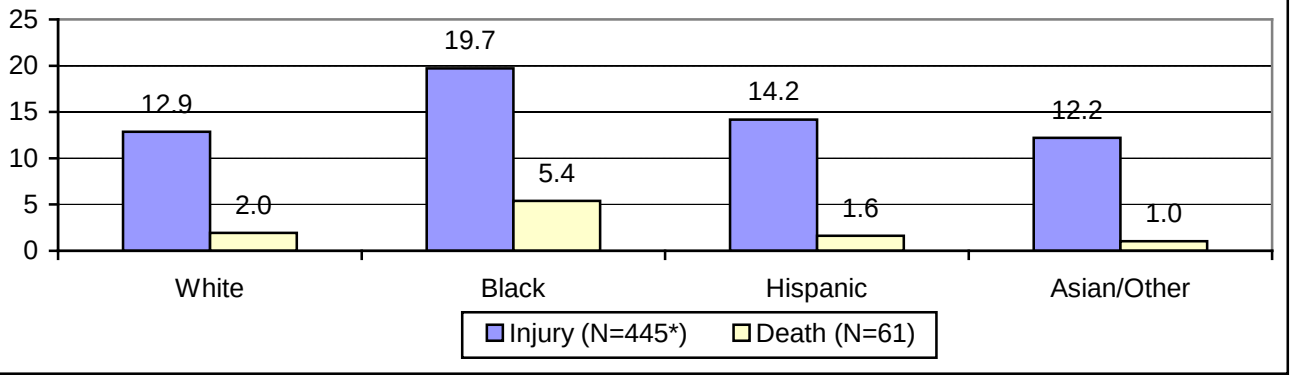
The black population had the highest rates of injury and death from pedestrian injuries.

Figure 3.49: Pedestrian Struck Injuries and Deaths by Race/Ethnicity: 2010



*Totals include nine injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010.

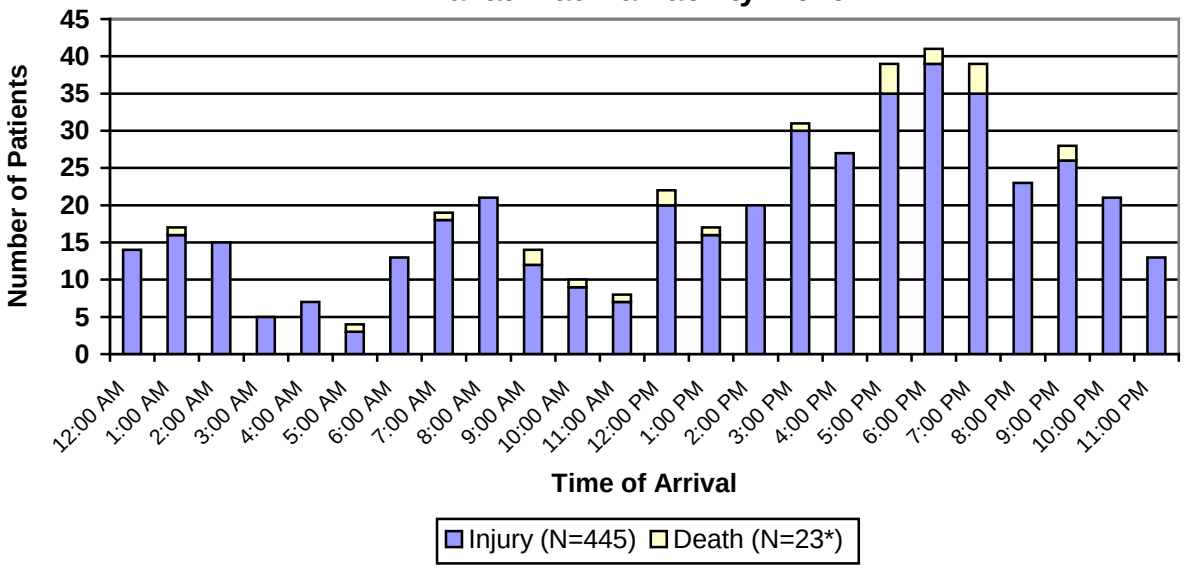
Figure 3.50: Pedestrian Struck Injury and Death Rates by Race/Ethnicity: 2010



*Totals include nine injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010.

Pedestrian arrivals to trauma centers had a small peak in the morning between 7:00 and 9:00, followed by a much larger increase in the afternoon and early evening hours, with 25% of arrivals between 5:00 and 8:00 pm.

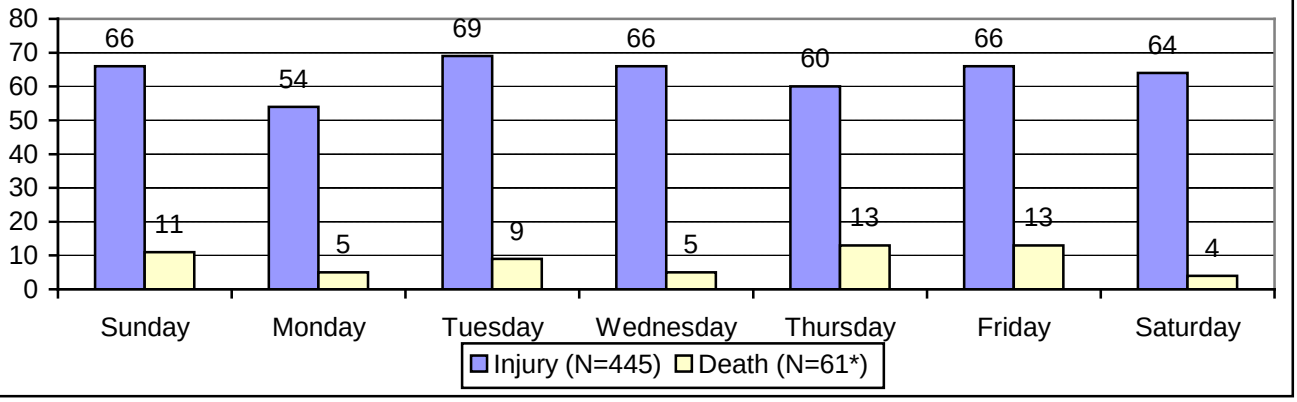
Figure 3.51: Pedestrian Struck Injuries and Deaths by Hour of Arrival at Trauma Facility: 2010



All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene or at non-trauma facilities not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

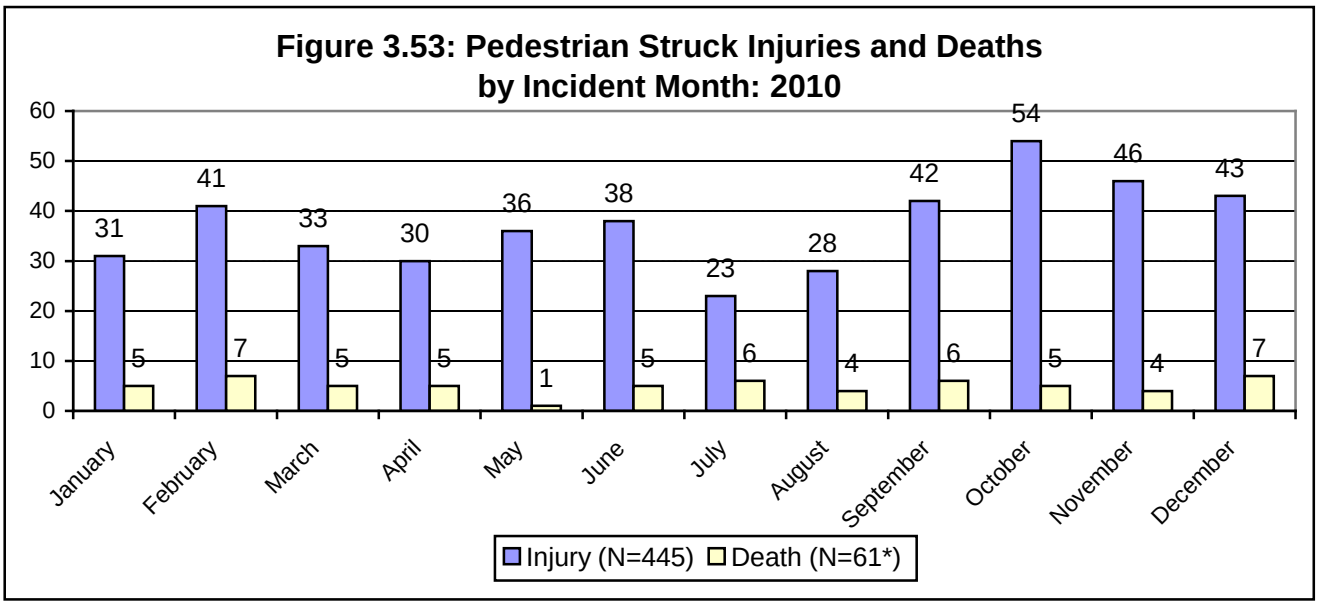
There was not a strong pattern to pedestrian injuries and deaths by day of week, although 43% of deaths occurred on Thursdays and Fridays.

Figure 3.52: Pedestrian Struck Injuries and Deaths by Incident Day of Week: 2010



*Totals include one death with unknown date of injury
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

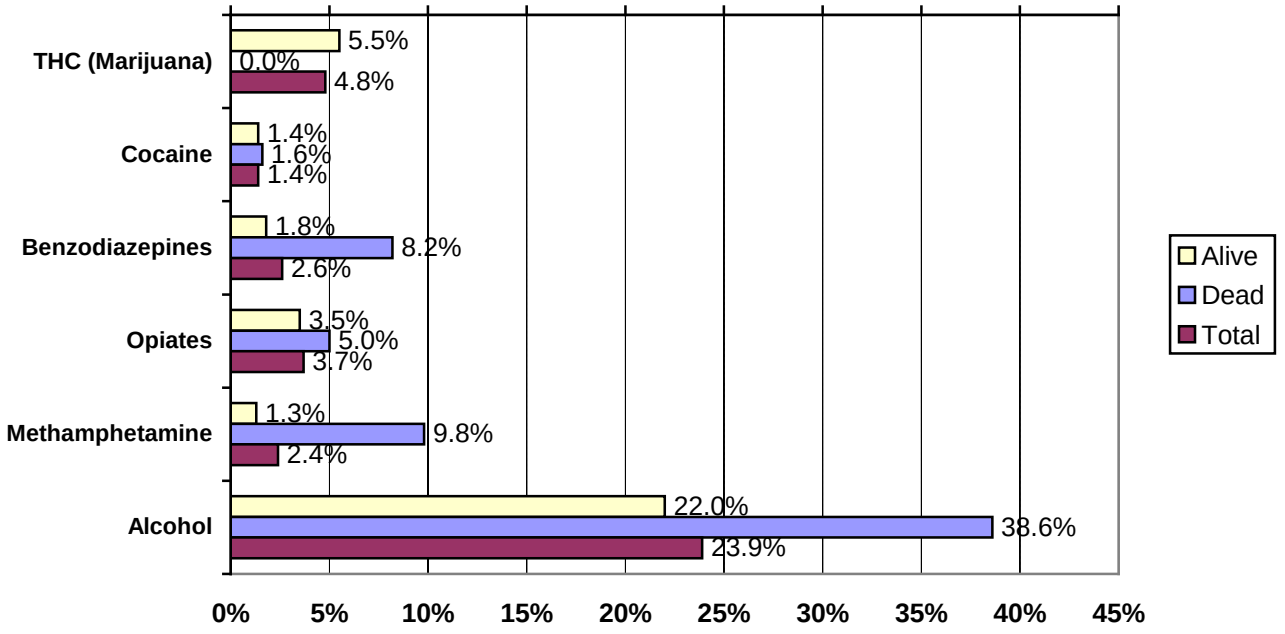
Pedestrian injuries occurred with highest frequency during the month of October.



*Totals include one death with unknown date of injury
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Twenty four percent of injured pedestrians had positive alcohol toxicology results, and 5% tested positive for marijuana.

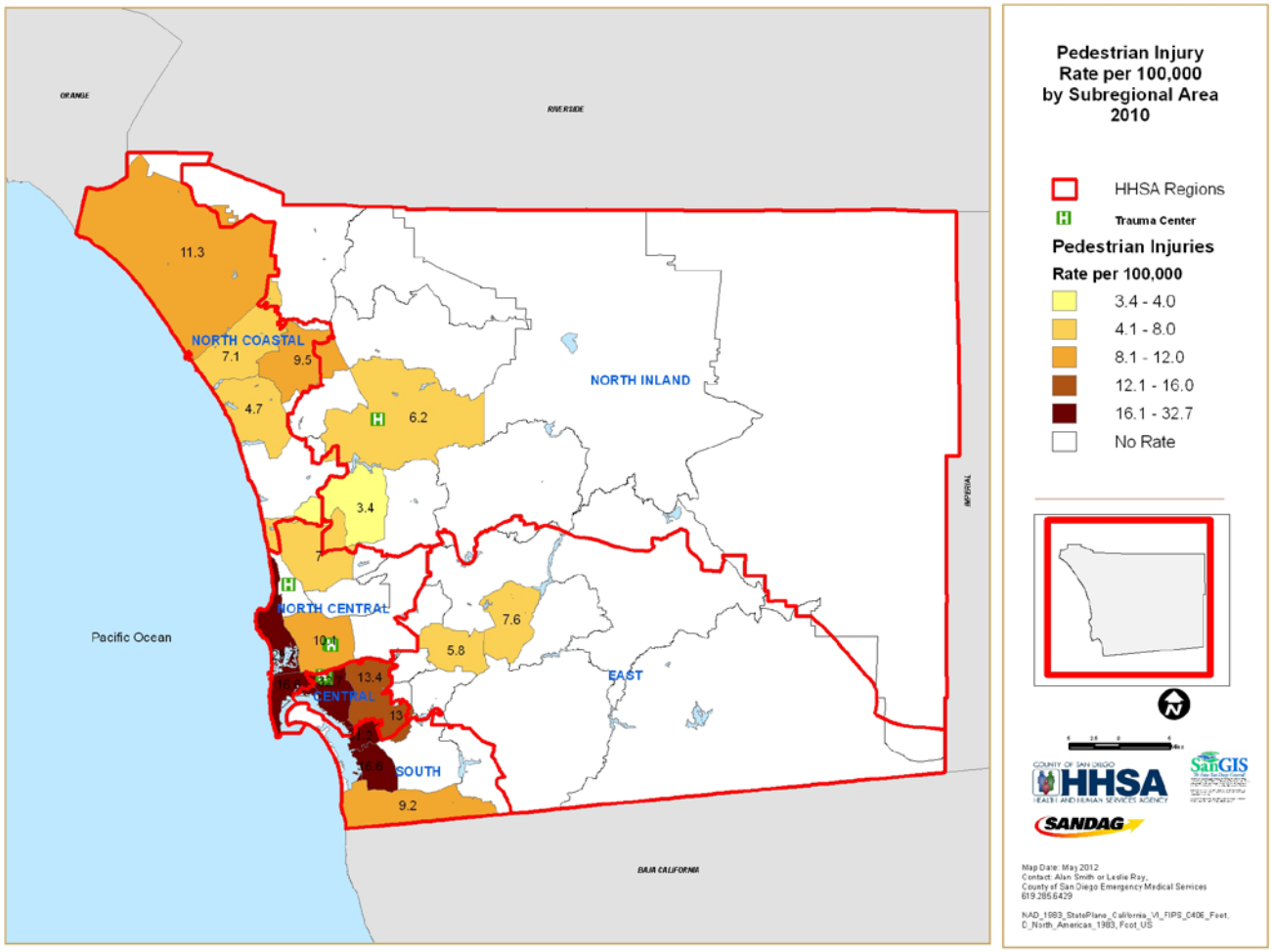
Figure 3.54: Pedestrian Toxicology Results
Percent Positive by Substance



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 60% of non-fatal and 89% of fatal pedestrian injuries. The Central, National City, and Coastal SRAs had the highest rates of pedestrian injury. At the HHSA Region level, the Central region had the highest rate of pedestrian injury (20.0 per 100,000). Population estimates for each of the HHSA regions can be found in Appendix B.

Figure 3.55: Pedestrian Struck Injury and Death Rates per 100,000 by Subregional Area: 2010



Please note there were 180 injuries and seven deaths with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego County Trauma Registry and Medical Examiner's Data, 2010; Population estimates, SANDAG.

Table 3.14: Pedestrian Struck Injuries and Deaths by Incident HHSA Region: 2010

HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	32	6.18	8	1.54	40	7.72
North Central	63	10.15	7	1.13	70	11.28
Central	89	17.44	13	2.55	102	19.98
South	52	10.12	8	1.56	60	11.67
East	16	3.07	10	1.92	26	4.98
North Inland	13	2.41	8	1.48	21	3.89
Unknown	180	--	7	--	187	--
Total	**445**	**13.80**	**61**	**1.89**	**506**	**15.69**

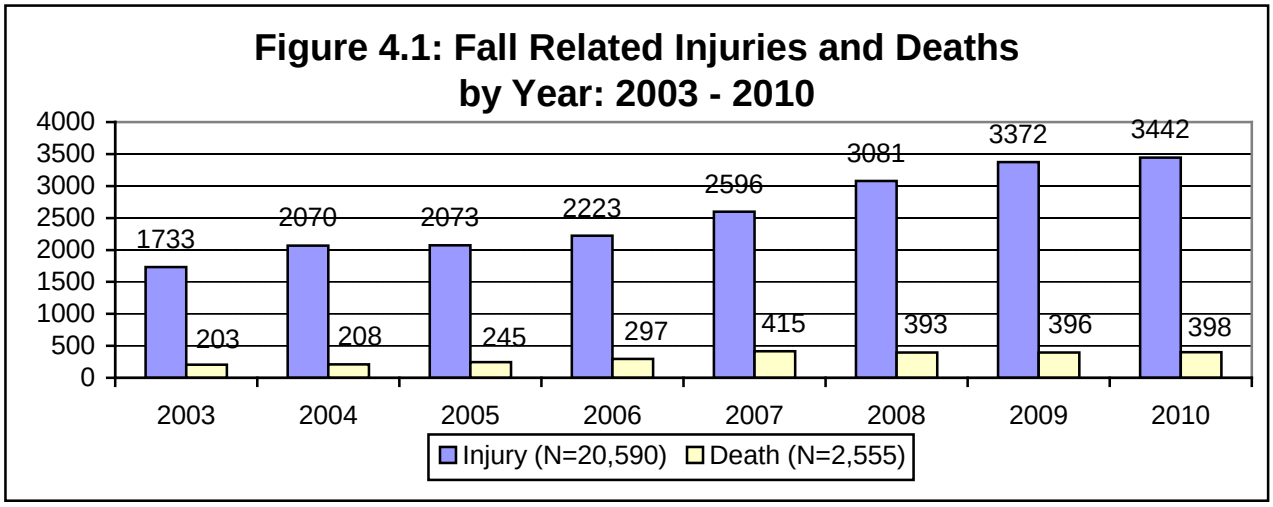
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Other Unintentional Injuries and Deaths

During 2010, 4,617 people were injured or killed in San Diego County following a fall or during a sports/recreation activity. Another 609 were unintentionally injured or killed due to a variety of mechanisms that can best be classified as "other." These include being struck by machinery/object, struck by falling object, and other unspecified accidents. See Technical Notes for a full listing of mechanisms included in the "other" category.

Fall Injuries

There were 3,442 injuries and 398 deaths resulting from falls in 2010. Injuries and deaths from falls have steadily increased since 2003 by an average of 10.5% per year for injuries and 11.0% per year for deaths.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

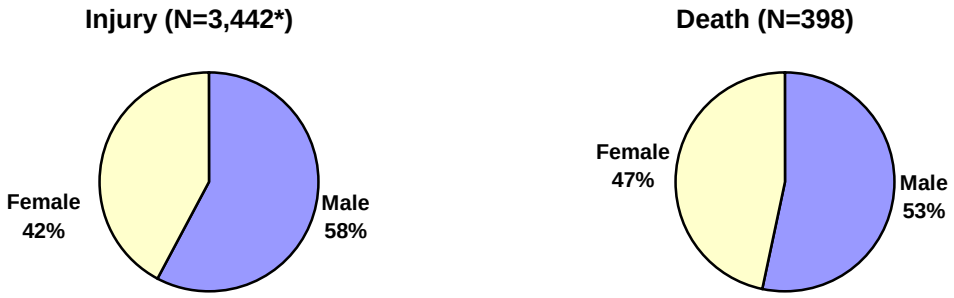
Table 4.1: Number and Rate (per 100,000) of Fall Related Injuries and Deaths by Year: 2003 - 2010

Year	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	1,733	58.52	203	6.85	1,936	65.37
2004	2,070	68.61	208	6.89	2,278	75.50
2005	2,073	67.94	245	8.03	2,318	75.97
2006	2,223	72.49	297	9.68	2,520	82.17
2007	2,596	83.79	415	13.39	3,011	97.18
2008	3,081	97.93	393	12.49	3,474	110.42
2009	3,372	106.26	396	12.48	3,768	118.74
2010	3,442	107.02	398	12.37	3,840	119.39
Total	**20,590**	**83.26**	**2,555**	**10.33**	**23,145**	**93.59**

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

Males accounted for 58% of injuries and 53% of deaths due to falls.

Figure 4.2: Fall Related Injuries and Deaths by Gender: 2010



*Total includes one injury with unspecified gender.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

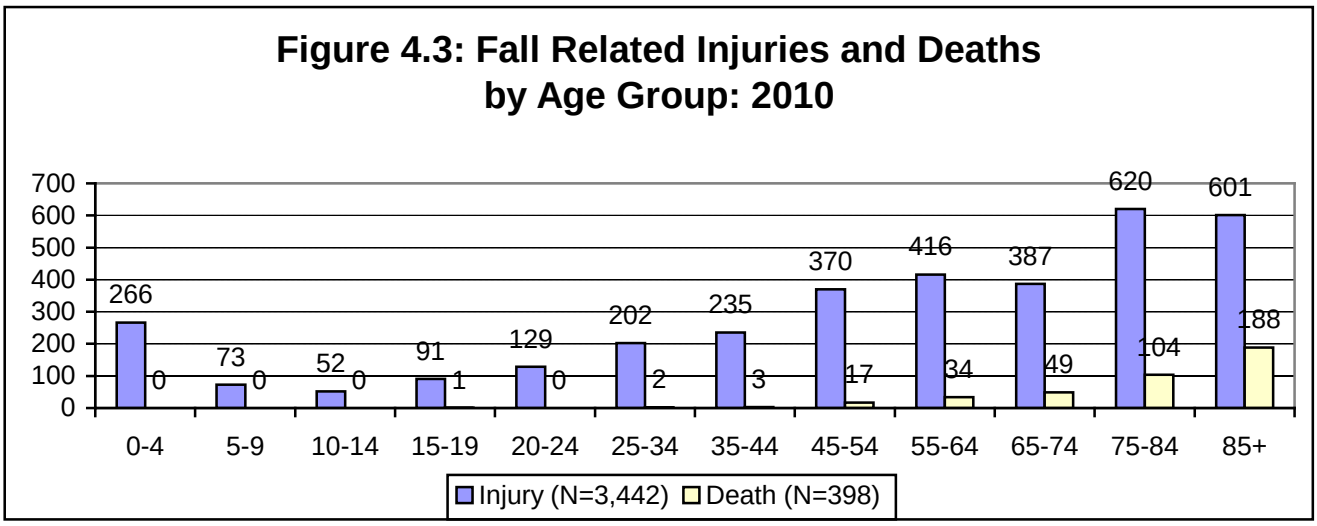
The risk of injury and death from falls increased steadily with age in adults, with the combined rate of fall-related injury and death surpassing one percent (1,000 per 100,000) in adults 85 and older.

Table 4.2: Number and Rate (per 100,000) of Fall Related Injuries and Deaths by Age Group and Gender: 2010

Age Group	Injury						Death						Overall Total	
	Male		Female		Total		Male		Female		Total			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
0-4	151	128.76	115	100.99	266	115.08	0	*	0	*	0	*	266	115.08
5-9	54	50.63	19	18.36	73	34.74	0	*	0	*	0	*	73	34.74
10-14	28	28.42	24	24.09	52	26.24	0	*	0	*	0	*	52	26.24
15-19	60	48.79	31	26.86	91	38.18	0	*	1	*	1	*	92	38.60
20-24	94	65.17	35	29.10	129	48.77	0	*	0	*	0	*	129	48.77
25-34	153	64.13	48	21.97	202	44.20	2	*	0	*	2	*	204	44.63
35-44	173	76.08	62	27.57	235	51.96	3	*	0	*	3	*	238	52.62
45-54	267	119.65	103	44.57	370	81.45	10	4.48	7	3.03	17	3.74	387	85.19
55-64	272	166.57	144	81.52	416	122.38	22	13.47	12	6.79	34	10.00	450	132.38
65-74	209	242.89	178	175.34	387	206.33	35	40.67	14	13.79	49	26.12	436	232.45
75-84	290	542.93	330	454.93	620	492.25	56	104.84	48	66.17	104	82.57	724	574.82
85+	236	962.60	365	899.72	601	923.41	84	342.62	104	256.36	188	288.85	789	1,212.26
Total	**1,987**	**123.72**	**1,454**	**89.84**	**3,442**	**106.75**	**212**	**13.20**	**186**	**11.49**	**398**	**12.34**	**3,840**	**119.09**

*Rates not calculated on fewer than five incidents.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG
Note: total includes one injury with unspecified gender.

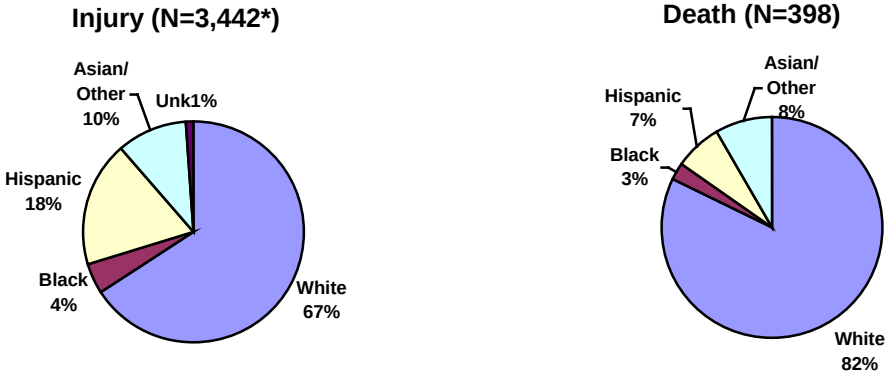
Eighty six percent of all fall deaths were 65 years or older, while 47% of nonfatal injuries were in this age group.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

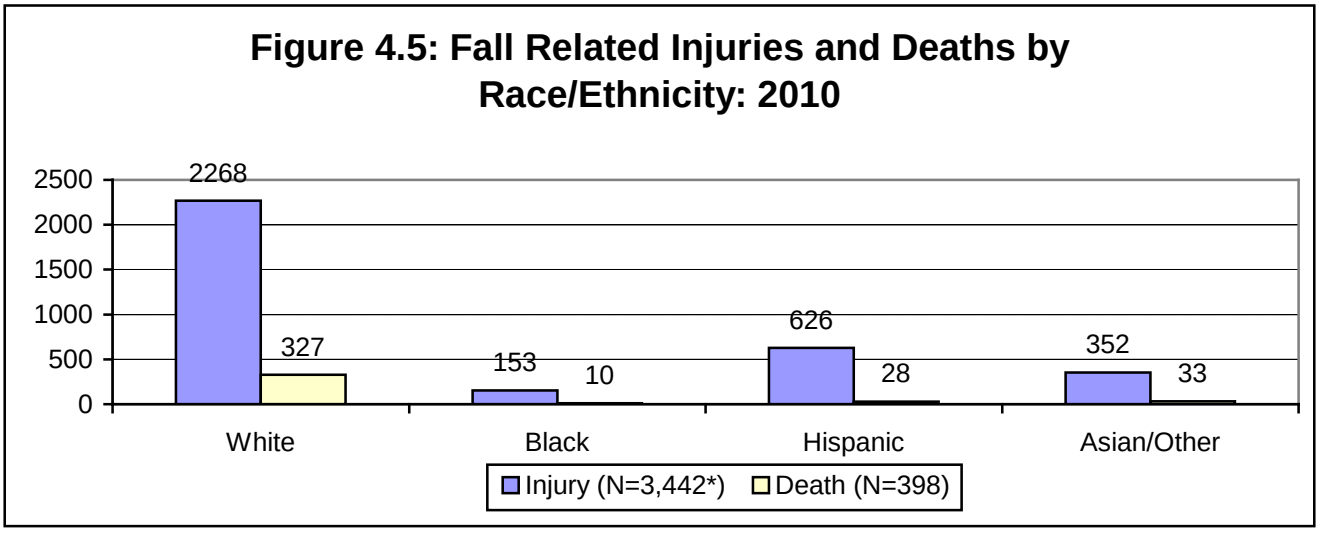
During 2010, the white population had the highest incidence and rate of injuries and deaths resulting from a fall. Sixty seven percent of injuries and 82% of deaths were white.

Figure 4.4: Fall Related Injuries and Deaths by Race/Ethnicity: 2010



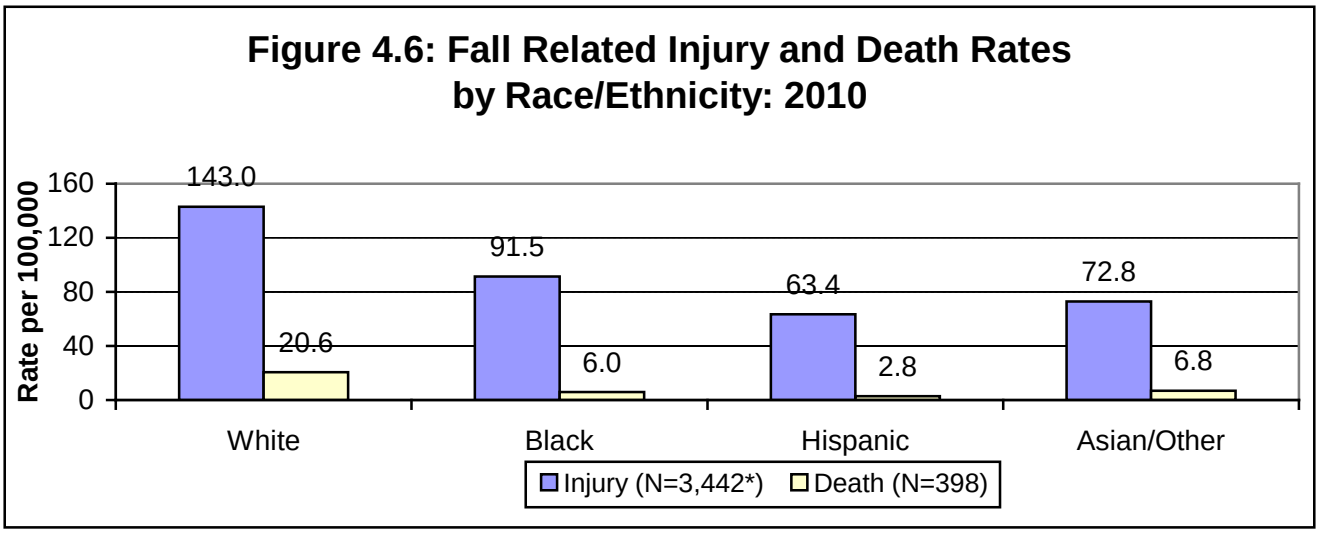
*Totals include 43 injuries of unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Figure 4.5: Fall Related Injuries and Deaths by Race/Ethnicity: 2010



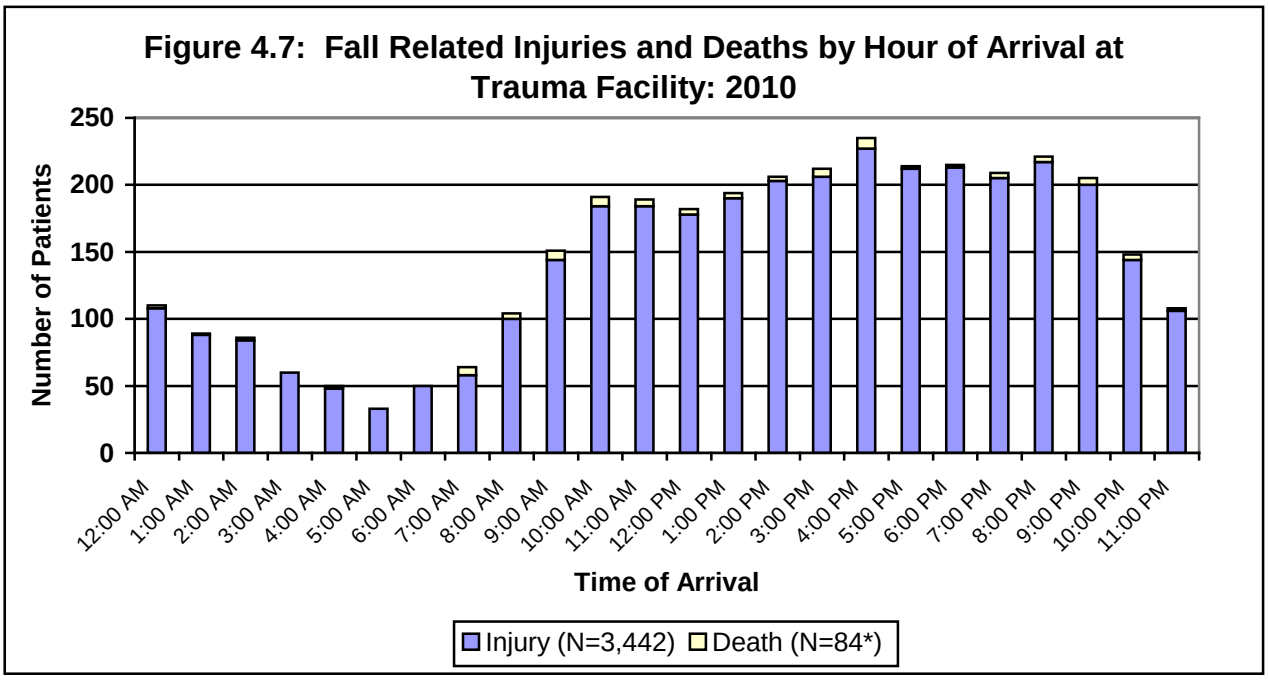
*Totals include 43 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Figure 4.6: Fall Related Injury and Death Rates by Race/Ethnicity: 2010



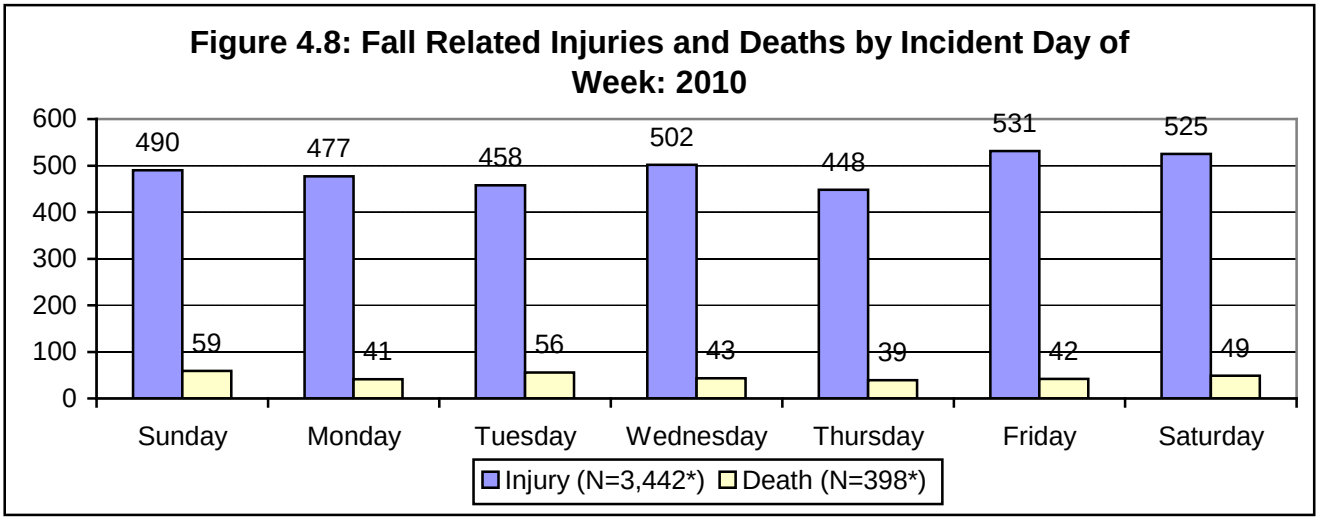
*Totals include 43 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Fall-related trauma admissions occurred at a sustained high level between 10:00 in the morning and 9:00 at night.

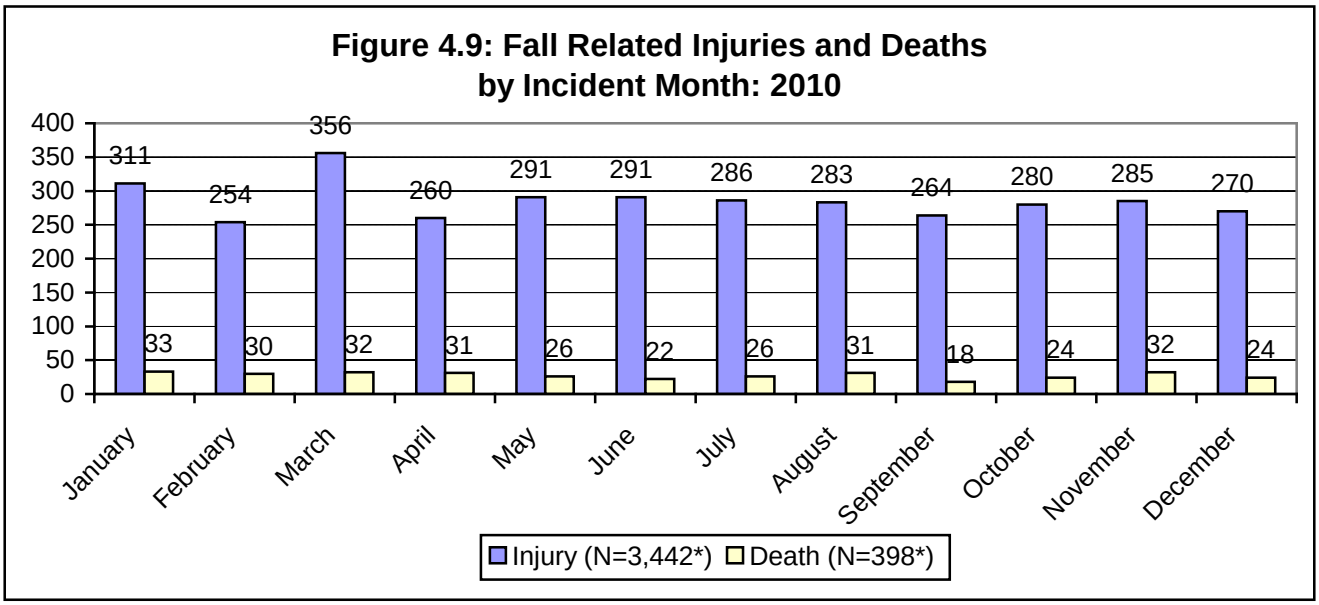


All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
*Note: limited to patients arriving at trauma facilities (deaths on scene or at non-trauma facilities not applicable)
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

There was not a distinct pattern to fall-related injuries by day of week. By month, March had the highest number of nonfatal falls.



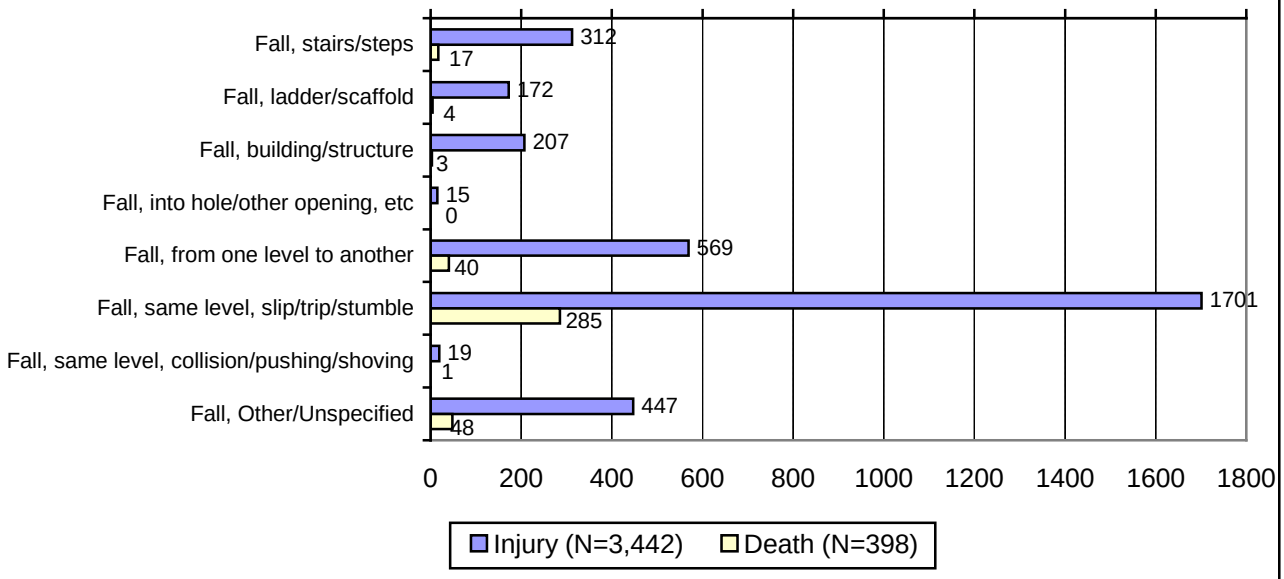
*Totals include 11 injuries and 69 deaths with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010



*Totals include 11 injuries and 69 deaths with unspecified incident dates.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

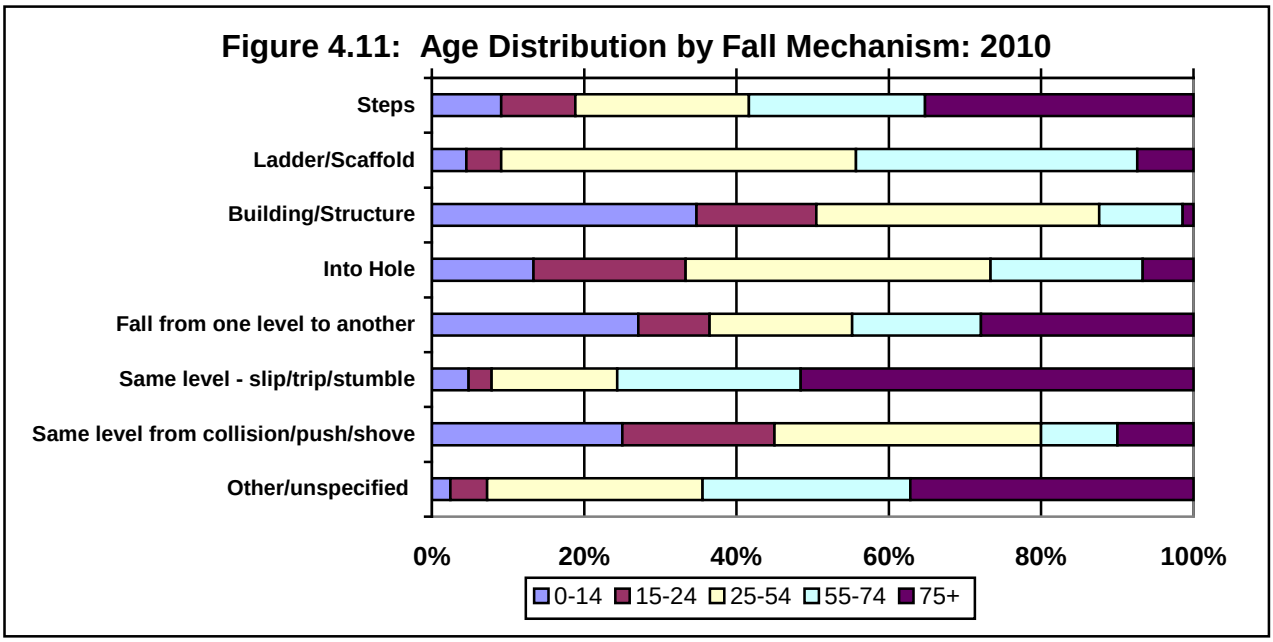
The ratio of deaths to severe injuries was much higher for falls on the same level (1 death per 6.0 nonfatal injuries) than for falls from one level to another (1 death per 20 injuries). This may at first seem paradoxical, but makes sense considering that those who are injured from same-level falls are generally far older and frailer than those who fell from a greater height. As figure 4.12 shows, more than half of the individuals who experienced a fall on the same level from slip/trip/stumble were 75 years or older, compared to only 1.4% of those who fell from buildings or other structures.

Figure 4.10: Fall Related Injuries and Deaths by Mechanism: 2010



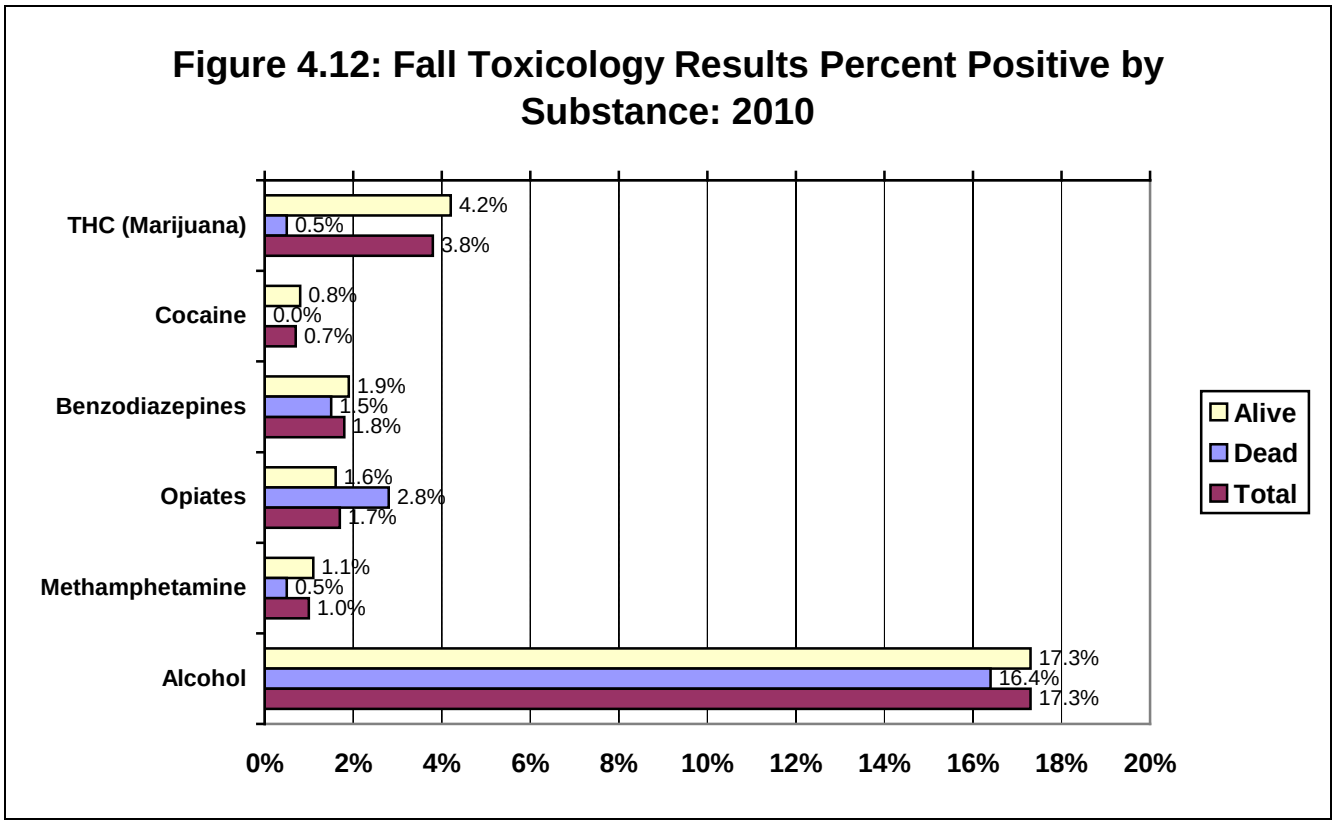
Source: County of San Diego Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Figure 4.11: Age Distribution by Fall Mechanism: 2010



Source: County of San Diego Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

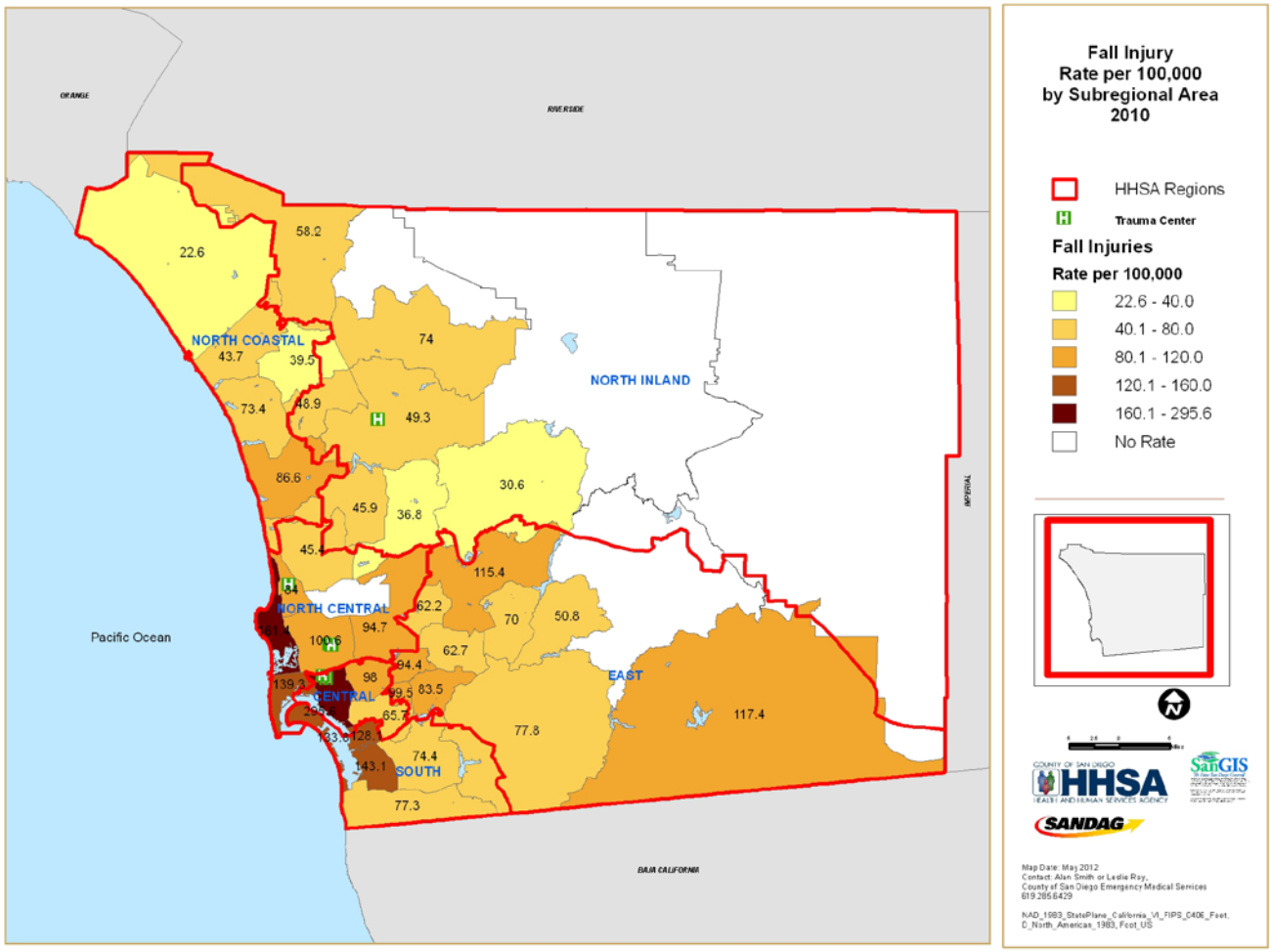
Alcohol was a significant factor in fall injuries, with 17% testing positive. No other substance exceeded five percent positive.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 73% of non-fatal and 87% of fatal fall-related injuries. Central San Diego and Chula Vista had the highest rates of fall-related injury. At the HHSA Region level, the highest injury rate was in the Central HHSA region (149.3 per 100,000), while the East region had the highest rate of death from falls (13.4 per 100,000). Population estimates for each of the MSAs can be found in Appendix B.

Figure 4.13: Fall Related Injury and Death Rates per 100,000 by San Diego Major Statistical Area



Please note there were 943 injuries and 51 deaths with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2010; Population estimates, SANDAG

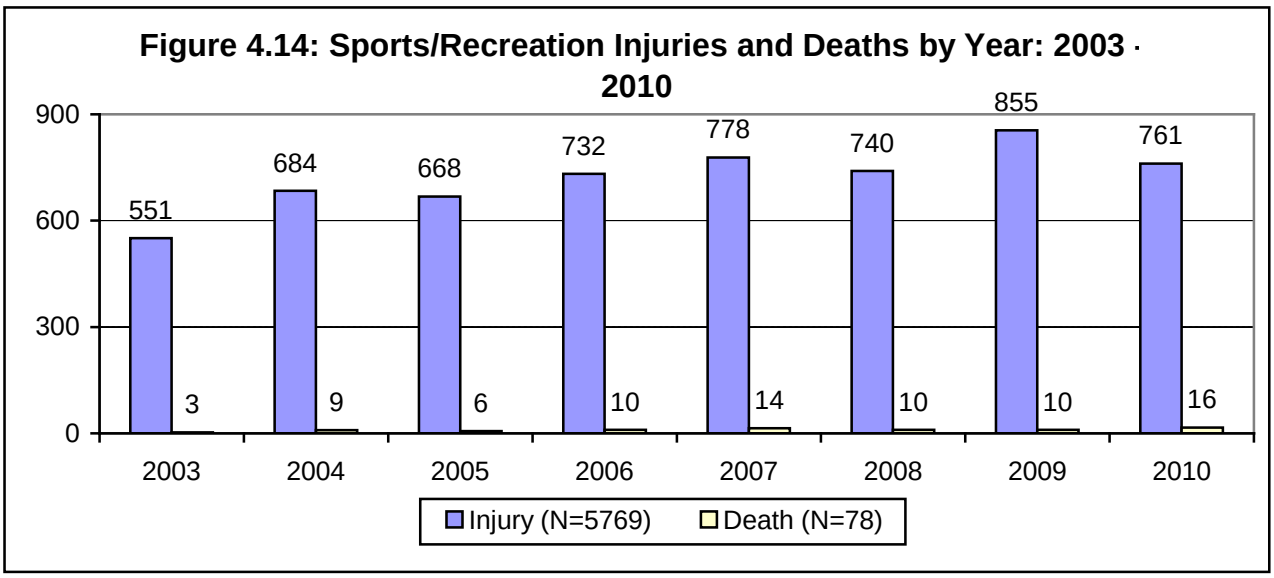
Table 4.3: Fall Related Injuries and Deaths by Incident HHSA Region: 2010

HHSA Region	Survived		Expired		Total	
	Number	Rate	Number	Rate	Number	Rate
North Coastal	215	41.49	58	11.19	273	52.69
North Central	521	83.96	62	9.99	583	93.96
Central	762	149.29	37	7.25	799	156.54
South	479	93.20	52	10.12	531	103.32
East	324	62.08	70	13.41	394	75.49
North Inland	198	36.70	68	12.60	266	49.30
Unknown	943		51		994	
Total	3,442	106.75	398	12.34	3,840	119.09

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Sports and Recreation Injuries

Sports and recreation injuries include: skates, roller blades, skiing, sleds, off road vehicles, riding animals, water sports, fall from playground equipment or injuries sustained while participating in sports (hit, kicked, struck). Sports and recreation did not account for a large number of injury deaths or years of potential life lost (see figure 1.2). Between 2003 and 2010, there was one death to every 74 severe injuries due to sports/recreation activity.



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

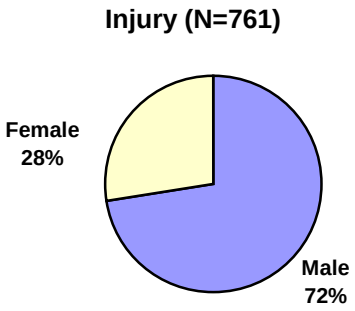
Table 4.4: Number and Rate (per 100,000) of Sports/Recreation Injuries and Deaths by Year, 2003 - 2010

Year	Injury		Death		Total	
	Incidence	Rate	Incidence	Rate	Incidence	Rate
2003	551	18.60	3	0.10	554	18.71
2004	684	22.67	9	0.30	693	22.97
2005	668	21.89	6	0.20	674	22.09
2006	732	23.87	10	0.33	742	24.19
2007	778	25.11	14	0.45	792	25.56
2008	740	23.52	10	0.32	750	23.84
2009	855	26.94	10	0.32	865	27.26
2010	761	23.66	16	0.50	777	24.16
Total	5769	23.33	78	0.32	5847	23.64

*Rates not calculated on less than five incidents
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2003 - 2010

Seventy two percent of injuries and 75% of the deaths due to sports and recreation activity were to males. Victims were also relatively young, with more than half of injuries occurring to people less than 25 years of age.

Figure 4.15: Sports/Recreation Injuries by Gender: 2010



Due to low numbers deaths were not included.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

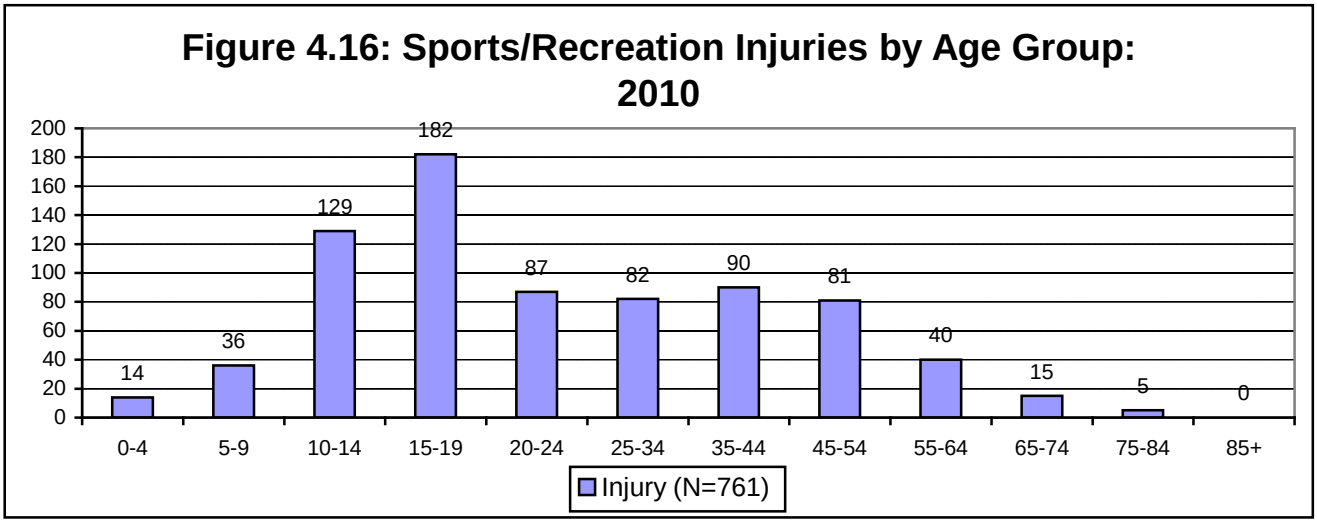
Males aged 15 to 19 years had the highest rate of severe injury due to sports/recreation activity (117.9 per 100,000).

Table 4.5: Number and Rate* (per 100,000) of Sports/Recreation Injury by Age Group and Gender: 2010

Age Group	Injury					
	Male		Female		Total	
	Number	Rate	Number	Rate	Number	Rate
0-4	8	6.82	6	5.27	14	6.06
5-9	27	25.31	9	8.70	36	17.13
10-14	91	92.37	38	38.15	129	65.11
15-19	145	117.92	37	32.06	182	76.35
20-24	67	46.45	20	16.63	87	32.89
25-34	59	24.73	23	10.53	82	17.94
35-44	72	31.66	18	8.00	90	19.90
45-54	49	21.96	31	13.41	81	17.83
55-64	21	12.86	19	10.76	40	11.77
65-74	9	10.46	6	5.91	15	8.00
75-84	2	3.74	3	4.14	5	3.97
85+	0	-	0	-	0	-
Total	**550**	**34.25**	**210**	**12.98**	**761**	**23.60**

*Rates not calculated on fewer than five incidents.
Due to low numbers deaths were not included in the table.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

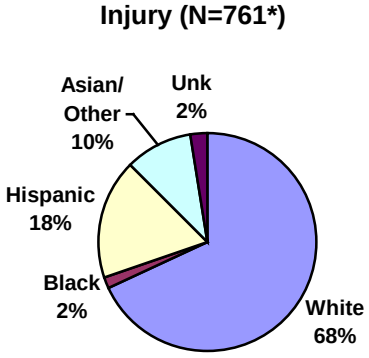
Sports and recreation injuries occurred with the greatest frequency in the 10 to 14 and 15 to 19 year age groups.



Deaths not shown due to low numbers
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

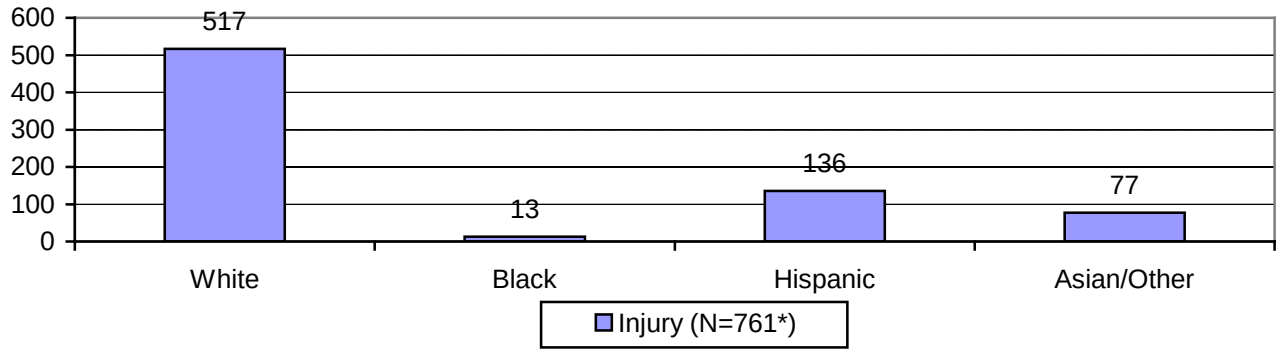
Whites suffered 68% of injuries and had the highest rate of injury due to sports and recreation activities (32.6 per 100,000).

Figure 4.17: Sports/Recreation Injuries by Race/Ethnicity: 2010



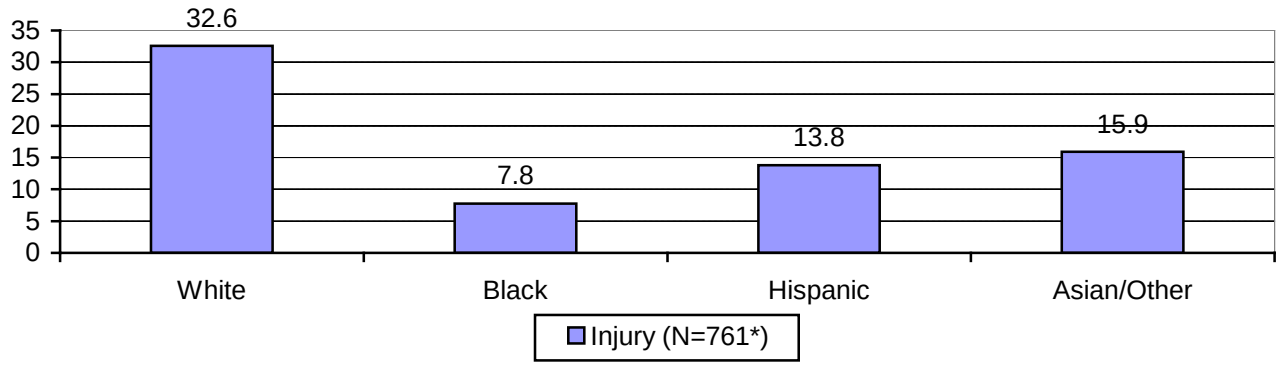
*Total includes 18 injuries with unspecified race/ethnicity.
Deaths not shown due to low numbers
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Figure 4.18: Sports/Recreation Injuries by Race/Ethnicity: 2010



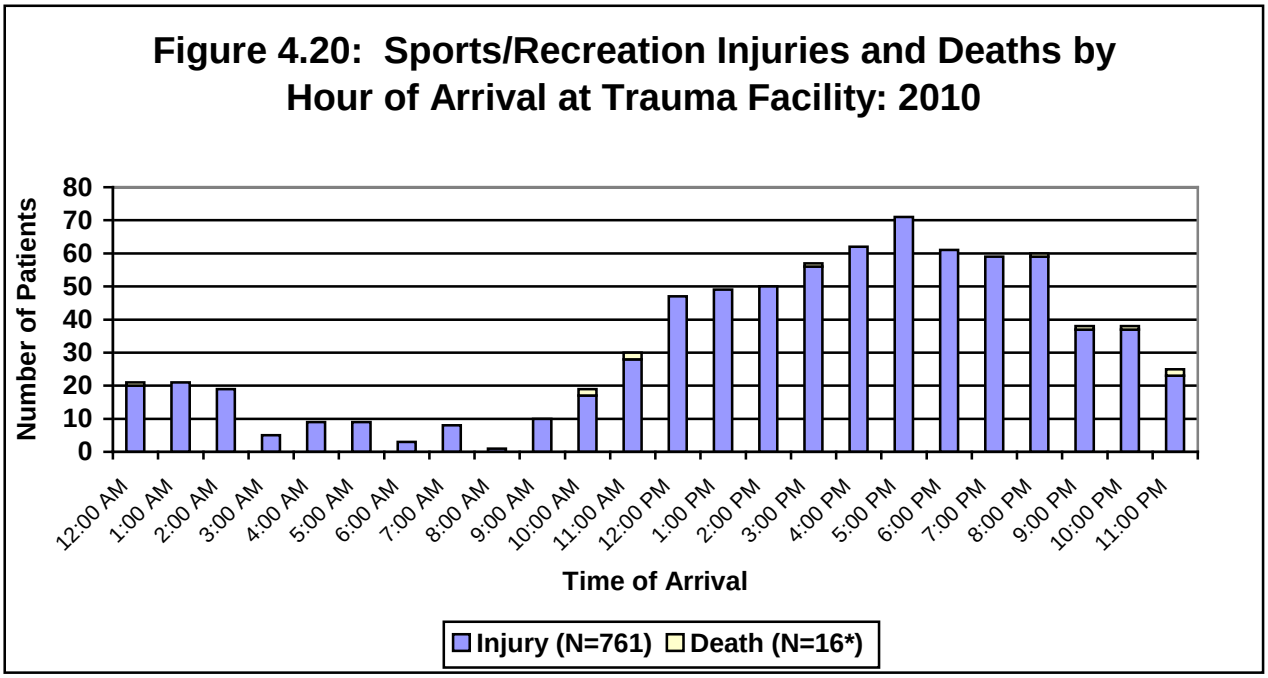
*Totals include 18 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

Figure 4.19: Sports/Recreation Injury Rates by Race/Ethnicity: 2010

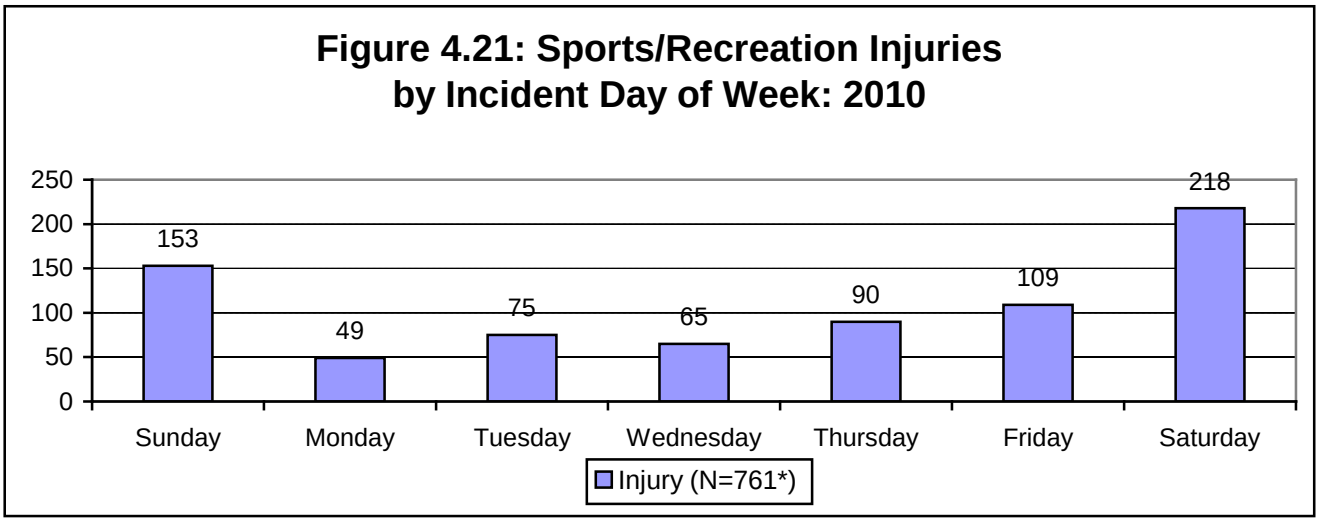


*Totals include 18 injuries with unspecified race/ethnicity.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego County Trauma Registry and Medical Examiner's Data, 2010

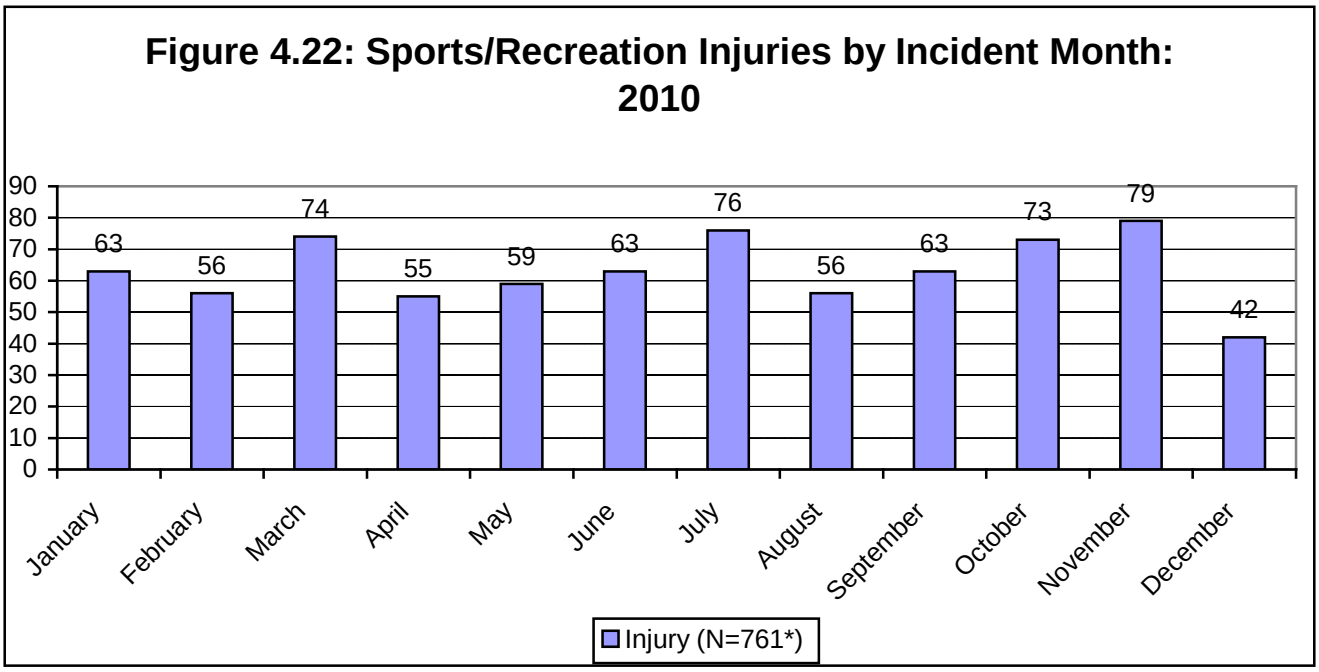
Trauma center admissions for sports and recreation-related injuries rose into the afternoon and evening hours, and on weekends (49% on Saturdays and Sundays). By month, November had the highest number of injuries (79).



All times are in one hour increments, for example, 6:00 - 6:59 = 6:00
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010



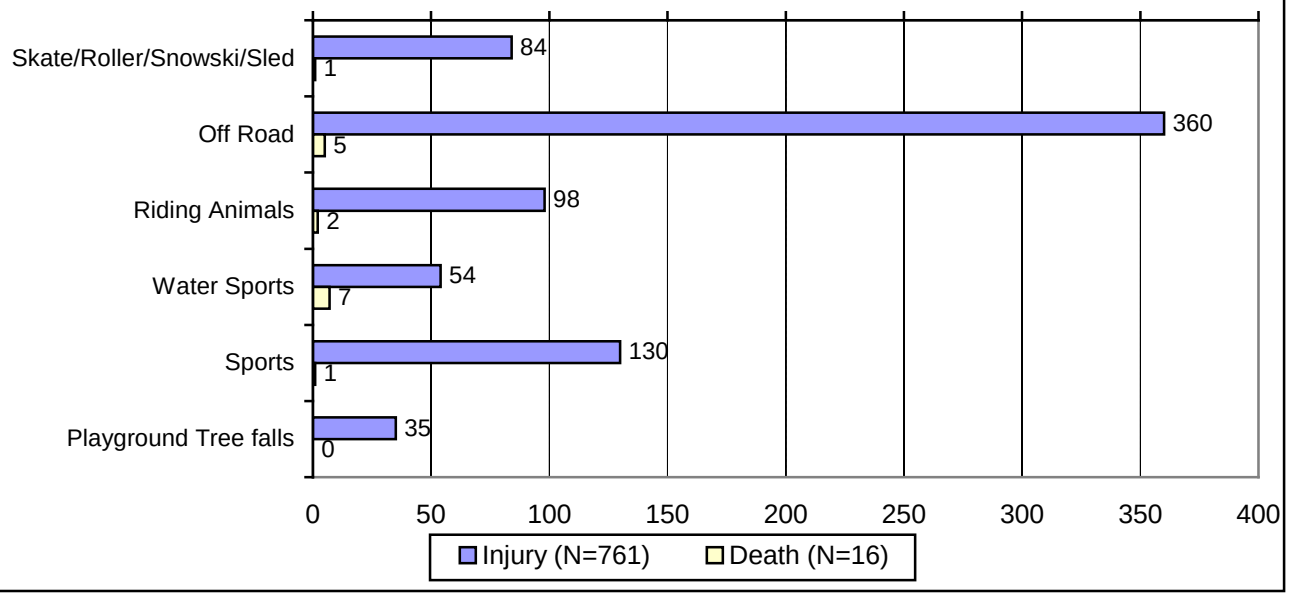
*Total includes 2 injuries with unspecified incident date.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010



*Total includes 2 injuries with unspecified incident date.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Off road vehicle crashes accounted for nearly half of sports/recreation related injuries and deaths, and were followed by sports, riding animals, and skating/sledding.

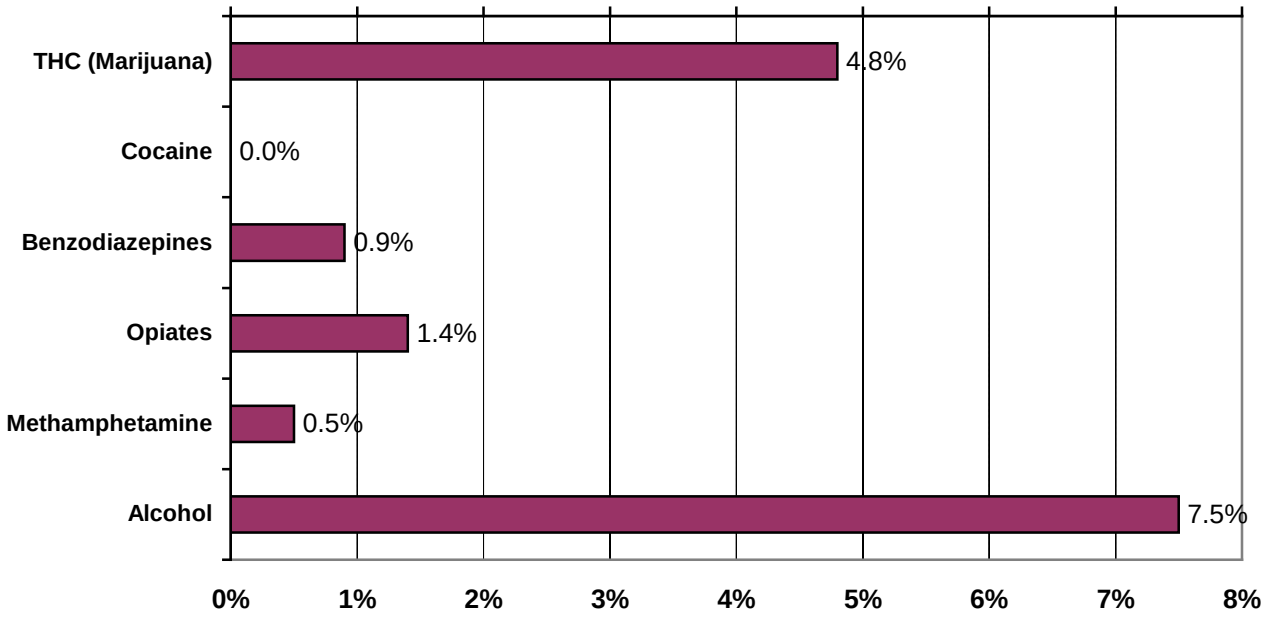
Figure 4.23: Sports/Recreation Injuries and Deaths by Mechanism: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010

Toxicology findings in general were much lower in patients who had suffered sports and recreation related injuries, compared with other mechanisms. Alcohol was the most common, with 7.5%, followed by marijuana at 4.8%.

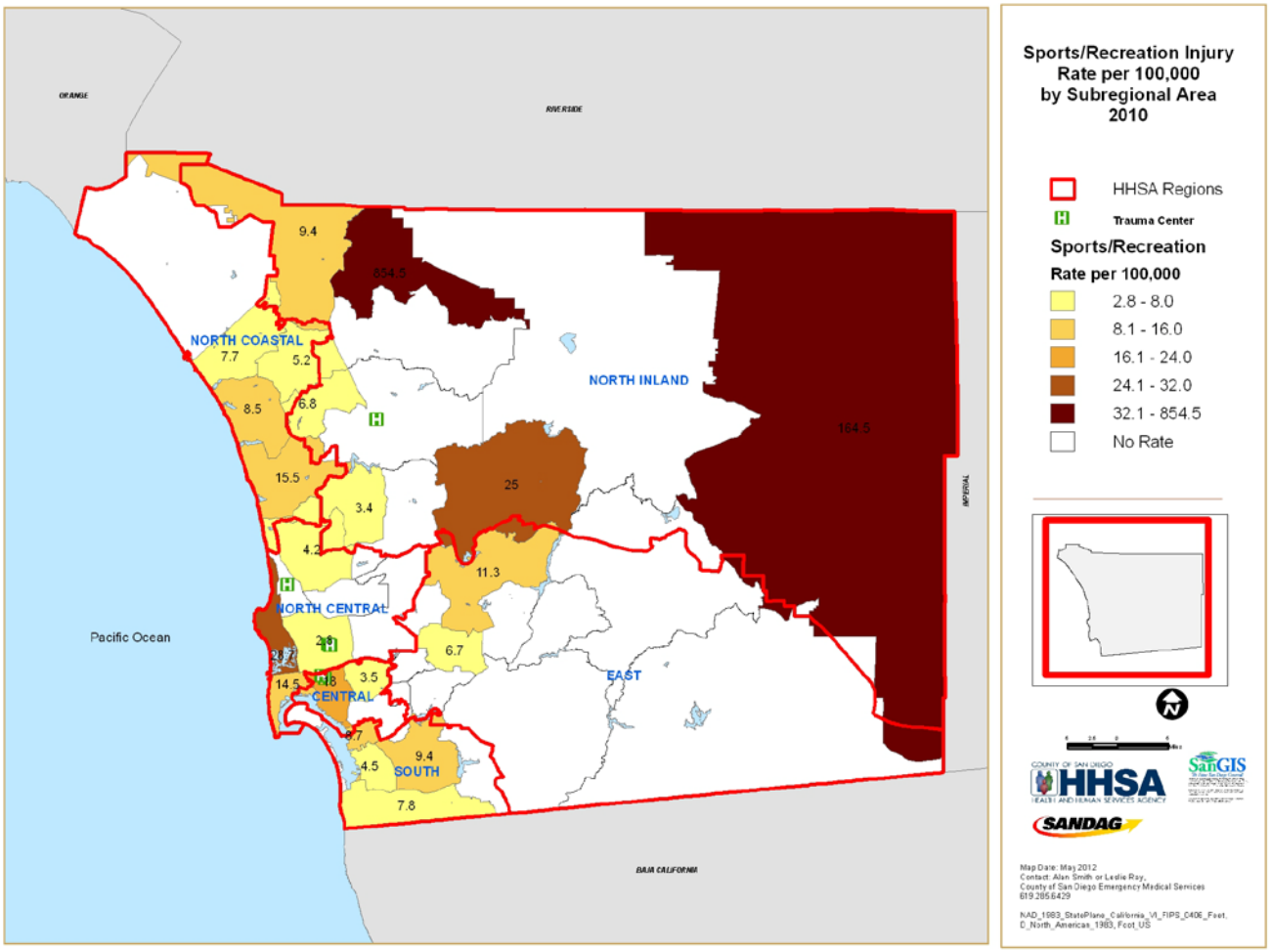
Figure 4.24: Sports/Recreation Toxicology Results
Percent Positive by Substance: 2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data, 2010
Note: excludes opiates and benzodiazepines that were documented as clinician administered.

Incidence and rates of injury by subregional areas (SRA) and HHSA region were calculated from the zip code where the incident took place. The incident zip code was available for 36% of non-fatal and 63% of fatal sports/recreation injuries. The highest rates were in the SRAs of Pauma and Anza-Borrego Springs. The sports/recreation injuries in these areas were primarily from off-road vehicle crashes. The Coastal and Central SRAs, in comparison, had higher levels of injuries due to water sports. At the HHSA Region level, the highest injury rate was in the North Inland HHSA region (14.1 per 100,000). Population estimates for each of the MSAs can be found in Appendix B.

Figure 4.25: Sports/Recreation Injury and Death Rates per 100,000 by Subregional Area: 2010



Please note there were 492 injuries with an unknown incident zip code.
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data: 2010; Population estimates, SANDAG

Table 4.6: Sports/Recreation Injuries by Incident HHSA Region: 2010

HHSA Region	Survived	
	Number	Rate
North Coastal	46	8.88
North Central	42	6.77
Central	39	7.64
South	34	6.62
East	32	6.13
North Inland	76	14.09
Unknown	492	
Total	761	23.60

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010

Who is at Greatest Risk of Violent Injury and Death? (Rates = Number per 100,000 Population)

- **Assault:** Males aged 20 to 24 had the highest overall rates of nonfatal assault injury (194.8), with the highest rates within this group among the black population (425.5).
- **Homicide:** The rate of homicide was highest among Hispanic men age 25 to 34 (7.6).
- **Unarmed Assault:** Blacks aged 20-24 years (121.4) were at greatest risk of serious injury due to an unarmed assault.
- **Assault by Firearm:** Blacks aged 20-24 (78.9) were most likely to be assaulted with a gun.
- **Assault by Stabbing:** Blacks 15-19 years of age (87.7) were at greatest risk of serious injury due to stabbing assault.
- **Homicide by Firearm:** Numbers were too low to calculate rates for any age/race group.
- **Self-Inflicted Injuries:** Black males 25-34 years of age (46.0) were most likely to inflict nonfatal injuries on themselves.
- **Suicide:** The traumatic suicide rate was highest for White males 85 years and older (79.0).

Table 5.1: Assaults by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	6	14.35	40,441	1	*	82,264	7	8.51
Black	5,795	2	*	5,619	0	-	11,414	2	*
Hispanic	51,759	11	21.25	50,917	6	11.78	102,676	17	16.56
Asian/Other	17,891	5	27.95	16,898	3	*	34,789	8	23.00
Subtotal	117,268	24	20.47	113,875	10	8.78	231,143	34	14.71
5-9									
White	39,708	0	-	38,730	1	*	78,438	1	*
Black	5,684	2	*	5,365	0	-	11,049	2	*
Hispanic	45,246	1	*	44,392	0	-	89,638	1	*
Asian/Other	16,019	2	*	15,004	1	*	31,023	3	*
Subtotal	106,657	5	4.69	103,491	2	*	210,148	7	3.33
10-14									
White	38,827	1	*	41,546	0	-	80,373	1	*
Black	6,107	0	-	5,875	1	*	11,982	1	*
Hispanic	35,908	4	*	35,737	1	*	71,645	5	6.98
Asian/Other	17,674	2	*	16,461	1	*	34,135	3	*
Subtotal	98,516	7	7.11	99,619	3	*	198,135	10	5.05
15-19									
White	49,029	31	63.23	46,979	5	10.64	96,008	36	37.50
Black	7,826	25	319.45	7,006	7	99.91	14,832	32	215.75
Hispanic	47,882	110	229.73	43,983	8	18.19	91,865	118	128.45
Asian/Other	18,229	21	115.20	17,427	0	-	35,656	21	58.90
Subtotal	122,966	194	157.77	115,395	21	18.20	238,361	215	90.20
20-24									
White	64,018	91	142.15	51,308	9	17.54	115,326	100	86.71
Black	9,401	40	425.49	7,073	11	155.52	16,474	52	315.65
Hispanic	50,017	98	195.93	42,609	14	32.86	92,626	112	120.92
Asian/Other	20,809	44	211.45	19,276	4	*	40,085	48	119.75
Subtotal	144,245	281	194.81	120,266	38	31.60	264,511	320	120.98
25-34									
White	96,217	124	128.88	85,293	14	16.41	181,510	138	76.03
Black	13,032	48	368.32	11,324	9	79.48	24,356	57	234.03
Hispanic	92,468	88	95.17	83,479	8	9.58	175,947	96	54.56
Asian/Other	36,860	40	108.52	38,388	5	13.02	75,248	45	59.80
Subtotal	238,577	310	129.94	218,484	36	16.48	457,061	346	75.70
35-44									
White	107262	97	90.43	98,700	9	9.12	205,962	106	51.47
Black	13839	26	187.87	11,367	5	43.99	25,206	31	122.99
Hispanic	72484	57	78.64	76,703	7	9.13	149,187	64	42.90
Asian/Other	33806	21	62.12	38,114	3	*	71,920	24	33.37
Subtotal	227391	205	90.15	224,884	25	11.12	452,275	230	50.85
45-54									
White	131,331	83	63.20	128,633	6	4.66	259,964	90	34.62
Black	13,099	22	167.95	11,907	3	*	25,006	25	99.98
Hispanic	48,730	27	55.41	55,717	3	*	104,447	30	28.72
Asian/Other	29,991	8	26.67	34,854	2	*	64,845	10	15.42
Subtotal	223,151	145	64.98	231,111	14	6.06	454,262	160	35.22

* Rate not calculated on less than five incidents.

** Totals include 39 patients with unspecified age, race/ethnicity, and/or gender.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.1: Assaults by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	29	26.63	112,591	5	4.44	221,481	34	15.35
Black	7,244	9	124.24	7,211	4	*	14,455	13	89.93
Hispanic	25,810	6	23.25	30,946	2	*	56,756	8	14.10
Asian/Other	21,354	6	28.10	25,886	1	*	47,240	7	14.82
Subtotal	163,298	51	31.23	176,634	12	6.79	339,932	63	18.53
65-74									
White	59,545	11	18.47	66,388	2	*	125,933	13	10.32
Black	3,538	1	*	3,901	0	-	7,439	1	*
Hispanic	11,853	1	*	16,596	0	-	28,449	1	*
Asian/Other	11,112	0	-	14,634	0	-	25,746	0	-
Subtotal	86,048	13	15.11	101,519	2	*	187,567	15	8.00
75-84									
White	38,356	1	*	49,870	1	*	88,226	2	*
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	1	*	10,231	2	*	17,195	3	*
Asian/Other	6,558	1	*	10,330	0	-	16,888	1	*
Subtotal	53,414	3	*	72,538	3	*	125,952	6	4.76
85+									
White	18,986	2	*	31,924	0	-	50,910	2	*
Black	543	1	*	912	0	-	1,455	1	*
Hispanic	2,677	2	*	4,170	0	-	6,847	2	*
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	5	20.39	40,568	0	-	65,085	5	7.68
Total**	**1,606,048**	**1,243**	**77.39**	**1,618,384**	**166**	**10.26**	**3,224,432**	**1,411**	**43.76**

* Rate not calculated on less than five incidents.

** Totals include 39 patients with unspecified age, race/ethnicity, and/or gender.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.2: Homicides by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	0	-	50,917	0	-	102,676	0	-
Asian/Other	17,891	1	*	16,898	0	-	34,789	1	*
Subtotal	117,268	1	*	113,875	0	-	231,143	1	*
5-9									
White	39,708	0	-	38,730	0	-	78,438	0	-
Black	5,684	0	-	5,365	0	-	11,049	0	-
Hispanic	45,246	0	-	44,392	0	-	89,638	0	-
Asian/Other	16,019	0	-	15,004	0	-	31,023	0	-
Subtotal	106,657	0	-	103,491	0	-	210,148	0	-
10-14									
White	38,827	0	-	41,546	0	-	80,373	0	-
Black	6,107	0	-	5,875	0	-	11,982	0	-
Hispanic	35,908	1	*	35,737	0	-	71,645	1	*
Asian/Other	17,674	0	-	16,461	0	-	34,135	0	-
Subtotal	98,516	1	*	99,619	0	-	198,135	1	*
15-19									
White	49,029	0	-	46,979	1	*	96,008	1	*
Black	7,826	1	*	7,006	1	*	14,832	2	*
Hispanic	47,882	4	*	43,983	1	*	91,865	5	5.44
Asian/Other	18,229	1	*	17,427	0	-	35,656	1	*
Subtotal	122,966	6	4.88	115,395	3	*	238,361	9	3.78
20-24									
White	64,018	1	*	51,308	0	-	115,326	1	*
Black	9,401	4	*	7,073	0	-	16,474	4	*
Hispanic	50,017	1	*	42,609	0	-	92,626	1	*
Asian/Other	20,809	2	*	19,276	1	*	40,085	3	*
Subtotal	144,245	8	5.55	120,266	1	*	264,511	9	3.40
25-34									
White	96,217	2	*	85,293	0	-	181,510	2	*
Black	13,032	1	*	11,324	0	-	24,356	1	*
Hispanic	92,468	7	7.57	83,479	1	*	175,947	8	4.55
Asian/Other	36,860	0	-	38,388	2	*	75,248	2	*
Subtotal	238,577	10	4.19	218,484	3	*	457,061	13	2.84
35-44									
White	107262	2	*	98,700	0	-	205,962	2	*
Black	13839	3	*	11,367	0	-	25,206	3	*
Hispanic	72484	1	*	76,703	0	-	149,187	1	*
Asian/Other	33806	0	-	38,114	1	*	71,920	1	*
Subtotal	227391	6	2.64	224,884	2	*	452,275	8	1.77
45-54									
White	131,331	5	3.81	128,633	1	*	259,964	6	2.31
Black	13,099	1	*	11,907	0	-	25,006	1	*
Hispanic	48,730	3	*	55,717	0	-	104,447	3	*
Asian/Other	29,991	0	-	34,854	0	-	64,845	0	-
Subtotal	223,151	9	4.03	231,111	1	*	454,262	10	2.20

* Rate not calculated on less than five incidents.

** Totals include one patient with unspecified age, race/ethnicity, and/or gender.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.2: Homicides by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	2	*	112,591	2	*	221,481	4	*
Black	7,244	1	*	7,211	0	-	14,455	1	*
Hispanic	25,810	0	-	30,946	0	-	56,756	0	-
Asian/Other	21,354	0	-	25,886	1	*	47,240	1	*
Subtotal	163,298	3	*	176,634	3	*	339,932	6	1.77
65-74									
White	59,545	2	*	66,388	0	-	125,933	2	*
Black	3,538	1	*	3,901	0	-	7,439	1	*
Hispanic	11,853	1	*	16,596	0	-	28,449	1	*
Asian/Other	11,112	0	-	14,634	1	*	25,746	1	*
Subtotal	86,048	4	*	101,519	1	*	187,567	5	2.67
75-84									
White	38,356	0	-	49,870	1	*	88,226	1	*
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	0	-	17,195	0	-
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	0	-	72,538	1	*	125,952	1	*
85+									
White	18,986	0	-	31,924	0	-	50,910	0	-
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	0	-	40,568	0	-	65,085	0	-
Total**	**1,606,048**	**48**	**2.99**	**1,618,384**	**15**	**0.93**	**3,224,432**	**63**	**1.95**

* Rate not calculated on less than five incidents.

** Totals include one patient with unspecified age, race/ethnicity, and/or gender.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.3: Assaults by Age Group, Race/Ethnicity and Mechanism: 2010

		Unarmed		Gunshot		Stabbing		Other Assault	
	Population	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Under 5									
White	82,264	7	8.51	0	-	0	-	0	-
Black	11,414	2	*	0	-	0	-	0	-
Hispanic	102,676	16	15.58	0	-	1	*	0	-
Asian/Other	34,789	8	23.00	0	-	0	-	0	-
Subtotal	231,143	33	14.28	0	-	1	*	0	-
5-9									
White	78,438	0	-	1	*	0	-	0	-
Black	11,049	2	*	0	-	0	-	0	-
Hispanic	89,638	1	*	0	-	0	-	0	-
Asian/Other	31,023	0	-	0	-	2	*	1	*
Subtotal	210,148	3	*	1	*	2	*	1	*
10-14									
White	80,373	1	*	0	-	0	-	0	-
Black	11,982	0	-	0	-	1	*	0	-
Hispanic	71,645	3	*	0	-	1	*	1	*
Asian/Other	34,135	2	*	0	-	1	*	0	-
Subtotal	198,135	6	3.03	0	-	3	*	1	*
15-19									
White	96,008	16	16.67	1	*	12	12.50	7	7.29
Black	14,832	8	53.94	8	53.94	13	87.65	3	*
Hispanic	91,865	38	41.37	19	20.68	49	53.34	12	13.06
Asian/Other	35,656	6	16.83	4	*	8	22.44	3	*
Subtotal	238,361	71	29.79	33	13.84	85	35.66	26	10.91
20-24									
White	115,326	51	44.22	5	4.34	33	28.61	11	9.54
Black	16,474	20	121.40	13	78.91	12	72.84	7	42.49
Hispanic	92,626	28	30.23	13	14.03	56	60.46	15	16.19
Asian/Other	40,085	21	52.39	7	17.46	10	24.95	10	24.95
Subtotal	264,511	122	46.12	38	14.37	115	43.48	45	17.01
25-34									
White	181,510	75	41.32	9	4.96	31	17.08	23	12.67
Black	24,356	23	94.43	13	53.37	10	41.06	11	45.16
Hispanic	175,947	34	19.32	11	6.25	40	22.73	11	6.25
Asian/Other	75,248	24	31.89	5	6.64	11	14.62	5	6.64
Subtotal	457,061	160	35.01	39	8.53	94	20.57	53	11.60
35-44									
White	205,962	58	28.16	7	3.40	25	12.14	16	7.77
Black	25,206	12	47.61	4	*	10	39.67	5	19.84
Hispanic	149,187	30	20.11	6	4.02	17	11.40	11	7.37
Asian/Other	71,920	10	13.90	0	-	7	9.73	7	9.73
Subtotal	452,275	112	24.76	17	3.76	60	13.27	41	9.07
45-54									
White	259,964	51	19.62	4	*	16	6.15	19	7.31
Black	25,006	6	23.99	2	*	10	39.99	7	27.99
Hispanic	104,447	16	15.32	2	*	5	4.79	7	6.70
Asian/Other	64,845	7	10.79	0	-	3	*	0	-
Subtotal	454,262	82	18.05	8	1.76	35	7.70	35	7.70

* Rate not calculated on less than five incidents.

** Totals include 39 victims with unspecified age or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG.

Table 5.3: Assaults by Age Group, Race/Ethnicity and Mechanism: 2010 (Continued)

		Unarmed		Gunshot		Stabbing		Other Assault	
	Population	Number	Rate	Number	Rate	Number	Rate	Number	Rate
55-64									
White	221,481	16	7.22	1	*	5	2.26	12	5.42
Black	14,455	4	*	0	-	5	34.59	4	*
Hispanic	56,756	3	*	1	*	2	*	2	*
Asian/Other	47,240	5	10.58	0	-	0	-	2	*
Subtotal	339,932	28	8.24	2	*	12	3.53	21	6.18
65-74									
White	125,933	6	4.76	0	-	2	*	5	3.97
Black	7,439	1	*	0	-	0	-	0	-
Hispanic	28,449	0	-	0	-	0	-	1	*
Asian/Other	25,746	0	-	0	-	0	-	0	-
Subtotal	187,567	7	3.73	0	-	2	*	6	3.20
75-84									
White	88,226	1	*	0	-	0	-	1	*
Black	3,643	0	-	0	-	0	-	0	-
Hispanic	17,195	3	*	0	-	0	-	0	-
Asian/Other	16,888	1	*	0	-	0	-	0	-
Subtotal	125,952	5	3.97	0	-	-	-	1	*
85+									
White	50,910	0	-	0	-	1	*	1	*
Black	1,455	0	-	0	-	1	*	0	-
Hispanic	6,847	1	*	0	-	1	*	0	-
Asian/Other	5,873	0	-	0	-	0	-	0	-
Subtotal	65,085	1	*	0	-	3	*	1	*
Total**	**3,224,432**	**630**	**19.54**	**138**	**4.28**	**412**	**12.78**	**231**	**7.16**

* Rate not calculated on less than five incidents.

** Totals include 39 victims with unspecified age or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG.

Table 5.4: Homicides by Age Group, Race/Ethnicity and Mechanism: 2010

		Unarmed		Gunshot		Stabbing		Other Assault	
	Population	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Under 5									
White	82,264	0	-	0	-	0	-	0	-
Black	11,414	0	-	0	-	0	-	0	-
Hispanic	102,676	0	-	0	-	0	-	0	-
Asian/Other	34,789	1	*	0	-	0	-	0	-
Subtotal	231,143	1	*	0	-	0	-	0	-
5-9									
White	78,438	0	-	0	-	0	-	0	-
Black	11,049	0	-	0	-	0	-	0	-
Hispanic	89,638	0	-	0	-	0	-	0	-
Asian/Other	31,023	0	-	0	-	0	-	0	-
Subtotal	210,148	0	-	0	-	0	-	0	-
10-14									
White	80,373	0	-	0	-	0	-	0	-
Black	11,982	0	-	0	-	0	-	0	-
Hispanic	71,645	0	-	1	*	0	-	0	-
Asian/Other	34,135	0	-	0	-	0	-	0	-
Subtotal	198,135	0	-	1	*	0	-	0	-
15-19									
White	96,008	0	-	0	-	0	-	1	*
Black	14,832	0	-	2	*	0	-	0	-
Hispanic	91,865	0	-	3	*	1	*	1	*
Asian/Other	35,656	0	-	1	*	0	-	0	-
Subtotal	238,361	0	-	6	2.52	1	*	2	*
20-24									
White	115,326	0	-	0	-	0	-	1	*
Black	16,474	0	-	3	*	1	*	0	-
Hispanic	92,626	0	-	1	*	0	-	0	-
Asian/Other	40,085	2	*	1	*	0	-	0	-
Subtotal	264,511	2	*	5	1.89	1	*	1	*
25-34									
White	181,510	0	-	1	*	1	*	0	-
Black	24,356	0	-	1	*	0	-	0	-
Hispanic	175,947	0	-	3	*	4	*	1	*
Asian/Other	75,248	0	-	0	-	2	*	0	-
Subtotal	457,061	0	-	5	1.09	7	1.53	1	*
35-44									
White	205,962	0	-	1	*	1	*	0	-
Black	25,206	1	*	1	*	1	*	0	-
Hispanic	149,187	1	*	0	-	0	-	0	-
Asian/Other	71,920	1	*	0	-	0	-	0	-
Subtotal	452,275	3	*	2	*	2	*	1	*
45-54									
White	259,964	2	*	2	*	2	*	0	-
Black	25,006	0	-	0	-	1	*	0	-
Hispanic	104,447	2	*	1	*	0	-	0	-
Asian/Other	64,845	0	-	0	-	0	-	0	-
Subtotal	454,262	4	*	3	*	3	*	0	-

* Rate not calculated on less than five incidents.

** Totals include one victim with unspecified age or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG.

Table 5.4: Homicides by Age Group, Race/Ethnicity and Mechanism: 2010 (Continued)

		Unarmed		Gunshot		Stabbing		Other Assault	
	Population	Number	Rate	Number	Rate	Number	Rate	Number	Rate
55-64									
White	221,481	0	-	4	*	0	-	0	-
Black	14,455	0	-	0	-	0	-	1	*
Hispanic	56,756	0	-	0	-	0	-	0	-
Asian/Other	47,240	1	*	0	-	0	-	0	-
Subtotal	339,932	1	*	4	*	0	-	1	*
65-74									
White	125,933	0	-	0	-	1	*	1	*
Black	7,439	0	-	0	-	1	*	0	-
Hispanic	28,449	1	*	0	-	0	-	0	-
Asian/Other	25,746	1	*	0	-	0	-	0	-
Subtotal	187,567	2	*	0	-	2	*	1	*
75-84									
White	88,226	1	*	0	-	0	-	0	-
Black	3,643	0	-	0	-	0	-	0	-
Hispanic	17,195	0	-	0	-	0	-	0	-
Asian/Other	16,888	0	-	0	-	0	-	0	-
Subtotal	125,952	1	*	0	-	0	-	0	-
85+									
White	50,910	0	-	0	-	0	-	0	-
Black	1,455	0	-	0	-	0	-	0	-
Hispanic	6,847	0	-	0	-	0	-	0	-
Asian/Other	5,873	0	-	0	-	0	-	0	-
Subtotal	65,085	0	-	0	-	0	-	0	-
Total**	**3,224,432**	**14**	**0.43**	**26**	**0.81**	**16**	**0.50**	**7**	**0.22**

* Rate not calculated on less than five incidents.

** Totals include one victim with unspecified age or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG.

Table 5.5: Self Inflicted Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	0	-	50,917	0	-	102,676	0	-
Asian/Other	17,891	0	-	16,898	0	-	34,789	0	-
Subtotal	117,268	0	-	113,875	0	-	231,143	0	-
5-9									
White	39,708	0	-	38,730	1	*	78,438	1	*
Black	5,684	0	-	5,365	0	-	11,049	0	-
Hispanic	45,246	0	-	44,392	0	-	89,638	0	-
Asian/Other	16,019	0	-	15,004	0	-	31,023	0	-
Subtotal	106,657	0	-	103,491	1	*	210,148	1	*
10-14									
White	38,827	0	-	41,546	0	-	80,373	0	-
Black	6,107	0	-	5,875	0	-	11,982	0	-
Hispanic	35,908	0	-	35,737	0	-	71,645	0	-
Asian/Other	17,674	0	-	16,461	0	-	34,135	0	-
Subtotal	98,516	0	-	99,619	0	-	198,135	0	-
15-19									
White	49,029	2	*	46,979	2	*	96,008	4	*
Black	7,826	0	-	7,006	1	*	14,832	1	*
Hispanic	47,882	2	*	43,983	2	*	91,865	4	*
Asian/Other	18,229	0	-	17,427	1	*	35,656	1	*
Subtotal	122,966	4	*	115,395	6	5.20	238,361	10	4.20
20-24									
White	64,018	8	12.50	51,308	1	*	115,326	9	7.80
Black	9,401	1	*	7,073	1	*	16,474	2	*
Hispanic	50,017	4	*	42,609	2	*	92,626	6	6.48
Asian/Other	20,809	2	*	19,276	1	*	40,085	3	*
Subtotal	144,245	15	10.40	120,266	5	4.16	264,511	20	7.56
25-34									
White	96,217	15	15.59	85,293	2	*	181,510	17	9.37
Black	13,032	6	46.04	11,324	1	*	24,356	7	28.74
Hispanic	92,468	5	5.41	83,479	1	*	175,947	6	3.41
Asian/Other	36,860	5	13.56	38,388	1	*	75,248	6	7.97
Subtotal	238,577	32	13.41	218,484	5	2.29	457,061	37	8.10
35-44									
White	107,262	11	10.26	98,700	5	5.07	205,962	16	7.77
Black	13,839	0	-	11,367	0	-	25,206	0	-
Hispanic	72,484	5	6.90	76,703	2	*	149,187	7	4.69
Asian/Other	33,806	2	*	38,114	0	-	71,920	2	*
Subtotal	227,391	19	8.36	224,884	7	3.11	452,275	26	5.75
45-54									
White	131,331	11	8.38	128,633	5	3.89	259,964	16	6.15
Black	13,099	1	*	11,907	0	-	25,006	1	*
Hispanic	48,730	3	*	55,717	0	-	104,447	3	*
Asian/Other	29,991	1	*	34,854	1	*	64,845	2	*
Subtotal	223,151	16	7.17	231,111	6	2.60	454,262	22	4.84

* Rate not calculated on less than five incidents.

**Totals include two injuries with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 5.5: Self Inflicted Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	7	6.43	112,591	4	*	221,481	11	4.97
Black	7,244	0	-	7,211	0	-	14,455	0	-
Hispanic	25,810	1	*	30,946	2	*	56,756	3	*
Asian/Other	21,354	0	-	25,886	0	-	47,240	0	-
Subtotal	163,298	8	4.90	176,634	6	3.40	339,932	14	4.12
65-74									
White	59,545	3	*	66,388	0	-	125,933	3	*
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	0	-	16,596	0	-	28,449	0	-
Asian/Other	11,112	1	*	14,634	0	-	25,746	1	*
Subtotal	86,048	4	*	101,519	0	-	187,567	4	*
75-84									
White	38,356	1	*	49,870	1	*	88,226	2	*
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	0	-	17,195	0	-
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	1	*	72,538	1	*	125,952	2	*
85+									
White	18,986	1	*	31,924	0	-	50,910	1	*
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	1	*	4,170	0	-	6,847	1	*
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	2	*	40,568	0	-	65,085	2	*
Total**	**1,606,048**	**101**	**6.29**	**1,618,384**	**37**	**2.29**	**3,224,432**	**138**	**4.28**

*Rate not calculated on less than five incidents.

**Totals include two injuries with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 5.6: Suicides by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	0	-	50,917	0	-	102,676	0	-
Asian/Other	17,891	0	-	16,898	0	-	34,789	0	-
Subtotal	117,268	0	-	113,875	0	-	231,143	0	-
5-9									
White	39,708	0	-	38,730	0	-	78,438	0	-
Black	5,684	0	-	5,365	0	-	11,049	0	-
Hispanic	45,246	0	-	44,392	0	-	89,638	0	-
Asian/Other	16,019	0	-	15,004	0	-	31,023	0	-
Subtotal	106,657	0	-	103,491	0	-	210,148	0	-
10-14									
White	38,827	2	*	41,546	0	-	80,373	2	*
Black	6,107	0	-	5,875	0	-	11,982	0	-
Hispanic	35,908	0	-	35,737	0	-	71,645	0	-
Asian/Other	17,674	0	-	16,461	0	-	34,135	0	-
Subtotal	98,516	2	*	99,619	0	-	198,135	2	*
15-19									
White	49,029	3	*	46,979	0	-	96,008	3	*
Black	7,826	0	-	7,006	0	-	14,832	0	-
Hispanic	47,882	1	*	43,983	1	*	91,865	2	*
Asian/Other	18,229	1	*	17,427	0	-	35,656	1	*
Subtotal	122,966	5	4.07	115,395	1	*	238,361	6	2.52
20-24									
White	64,018	11	17.18	51,308	2	*	115,326	13	11.27
Black	9,401	0	-	7,073	0	-	16,474	0	-
Hispanic	50,017	5	10.00	42,609	0	-	92,626	5	5.40
Asian/Other	20,809	1	*	19,276	0	-	40,085	1	*
Subtotal	144,245	17	11.79	120,266	2	*	264,511	19	7.18
25-34									
White	96,217	5	5.20	85,293	1	*	181,510	6	3.31
Black	13,032	3	*	11,324	0	-	24,356	3	*
Hispanic	92,468	1	*	83,479	1	*	175,947	2	*
Asian/Other	36,860	7	18.99	38,388	0	-	75,248	7	9.30
Subtotal	238,577	16	6.71	218,484	2	*	457,061	18	3.94
35-44									
White	107262	11	10.26	98,700	0	-	205,962	11	5.34
Black	13839	1	*	11,367	0	-	25,206	1	*
Hispanic	72484	3	*	76,703	0	-	149,187	3	*
Asian/Other	33806	0	-	38,114	0	-	71,920	0	-
Subtotal	227391	15	6.60	224,884	0	-	452,275	15	3.32
45-54									
White	131,331	26	19.80	128,633	6	4.66	259,964	32	12.31
Black	13,099	0	-	11,907	0	-	25,006	0	-
Hispanic	48,730	2	*	55,717	0	-	104,447	2	*
Asian/Other	29,991	2	*	34,854	2	*	64,845	4	*
Subtotal	223,151	30	13.44	231,111	8	3.46	454,262	38	8.37

* Rate not calculated on less than five incidents.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG

Table 5.6: Suicides by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	31	28.47	112,591	6	5.33	221,481	37	16.71
Black	7,244	0	-	7,211	0	-	14,455	0	-
Hispanic	25,810	3	*	30,946	0	-	56,756	3	*
Asian/Other	21,354	0	-	25,886	0	-	47,240	0	-
Subtotal	163,298	34	20.82	176,634	6	3.40	339,932	40	11.77
65-74									
White	59,545	16	26.87	66,388	3	*	125,933	19	15.09
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	0	-	16,596	0	-	28,449	0	-
Asian/Other	11,112	1	*	14,634	0	-	25,746	1	*
Subtotal	86,048	17	19.76	101,519	3	*	187,567	20	10.66
75-84									
White	38,356	12	31.29	49,870	2	*	88,226	14	15.87
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	0	-	17,195	0	-
Asian/Other	6,558	2	*	10,330	0	-	16,888	2	*
Subtotal	53,414	14	26.21	72,538	2	*	125,952	16	12.70
85+									
White	18,986	15	79.01	31,924	0	-	50,910	15	29.46
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	15	61.18	40,568	0	-	65,085	15	23.05
Total	**1,606,048**	**165**	**10.27**	**1,618,384**	**24**	**1.48**	**3,224,432**	**189**	**5.86**

* Rate not calculated on less than five incidents.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services.
San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG

Who is at Greatest Risk of Transportation Related Injury and Death? (Rates = Number per 100,000 Population)

- **Motor Vehicle Occupant (MVO) Injury:** The highest MVO injury rates were to black women aged 20 to 24 years (353.5), followed by Asian/Other men aged 65-74 years (242.8) and black men between 20 and 24 years of age (159.6).

- **Motor Vehicle Occupant Death:** The highest motor vehicle occupant death rates were to White men 85 years and older (47.4).

- **Motorcycle Crash Injury:** Motorcycle injury rates were highest among black males aged 20-24 (85.1) and white 25-34 year old men (80.0).

- **Motorcycle Crash Death:** Number was too low to calculate all age, gender, and race/ethnicity breakdowns. **No Table Appears.**

- **Pedalcycle Crash Injury:** Asian/other males aged 10-14 (79.2) and 5-9 (56.2) were at highest risk of severe injury following a pedalcycle crash.

- **Pedalcycle Crash Death:** Number was too low to calculate all age, gender, and race/ethnicity breakdowns. **No Table Appears.**

- **Pedestrian Injury:** The highest rates of pedestrian injury were among black males 15-19 years of age (89.5), followed by Hispanic males between 55 and 64 years (42.6).

- **Pedestrian Death:** Number was too low to calculate all age, gender, and race/ethnicity breakdowns. **No Table Appears.**

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Table 5.7: Motor Vehicle Occupant Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	8	19.13	40,441	3	*	82,264	11	13.37
Black	5,795	0	-	5,619	3	*	11,414	3	*
Hispanic	51,759	8	15.46	50,917	15	29.46	102,676	23	22.40
Asian/Other	17,891	3	*	16,898	0	-	34,789	3	*
Subtotal	117,268	19	16.20	113,875	21	18.44	231,143	40	17.31
5-9									
White	39,708	5	12.59	38,730	8	20.66	78,438	13	16.57
Black	5,684	4	*	5,365	3	*	11,049	7	63.35
Hispanic	45,246	11	24.31	44,392	13	29.28	89,638	24	26.77
Asian/Other	16,019	5	31.21	15,004	3	*	31,023	8	25.79
Subtotal	106,657	26	24.38	103,491	27	26.09	210,148	53	25.22
10-14									
White	38,827	6	15.45	41,546	7	16.85	80,373	13	16.17
Black	6,107	0	-	5,875	2	*	11,982	2	*
Hispanic	35,908	7	19.49	35,737	15	41.97	71,645	22	30.71
Asian/Other	17,674	5	28.29	16,461	1	*	34,135	6	17.58
Subtotal	98,516	18	18.27	99,619	25	25.10	198,135	43	21.70
15-19									
White	49,029	46	93.82	46,979	31	65.99	96,008	77	80.20
Black	7,826	6	76.67	7,006	9	128.46	14,832	15	101.13
Hispanic	47,882	35	73.10	43,983	38	86.40	91,865	73	79.46
Asian/Other	18,229	10	54.86	17,427	12	68.86	35,656	22	61.70
Subtotal	122,966	97	78.88	115,395	91	78.86	238,361	188	78.87
20-24									
White	64,018	83	129.65	51,308	72	140.33	115,326	155	134.40
Black	9,401	15	159.56	7,073	25	353.46	16,474	40	242.81
Hispanic	50,017	63	125.96	42,609	37	86.84	92,626	100	107.96
Asian/Other	20,809	19	91.31	19,276	26	134.88	40,085	45	112.26
Subtotal	144,245	183	126.87	120,266	163	135.53	264,511	346	130.81
25-34									
White	96,217	92	95.62	85,293	64	75.04	181,510	156	85.95
Black	13,032	19	145.79	11,324	15	132.46	24,356	34	139.60
Hispanic	92,468	70	75.70	83,479	67	80.26	175,947	137	77.86
Asian/Other	36,860	19	51.55	38,388	35	91.17	75,248	54	71.76
Subtotal	238,577	202	84.67	218,484	185	84.67	457,061	387	84.67
35-44									
White	107,262	54	50.34	98,700	53	53.70	205,962	107	51.95
Black	13,839	9	65.03	11,367	9	79.18	25,206	18	71.41
Hispanic	72,484	36	49.67	76,703	41	53.45	149,187	77	51.61
Asian/Other	33,806	22	65.08	38,114	21	55.10	71,920	43	59.79
Subtotal	227,391	126	55.41	224,884	126	56.03	452,275	252	55.72
45-54									
White	131,331	73	55.58	128,633	72	55.97	259,964	145	55.78
Black	13,099	9	68.71	11,907	7	58.79	25,006	16	63.98
Hispanic	48,730	30	61.56	55,717	30	53.84	104,447	60	57.45
Asian/Other	29,991	15	50.02	34,854	25	71.73	64,845	40	61.69
Subtotal	223,151	131	58.70	231,111	134	57.98	454,262	265	58.34

* Rate not calculated on less than five incidents.

** Totals and subtotals include 34 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.7: Motor Vehicle Occupant Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	60	55.10	112,591	52	46.18	221,481	112	50.57
Black	7,244	5	69.02	7,211	5	69.34	14,455	10	69.18
Hispanic	25,810	19	73.61	30,946	24	77.55	56,756	43	75.76
Asian/Other	21,354	14	65.56	25,886	16	61.81	47,240	30	63.51
Subtotal	163,298	101	61.85	176,634	99	56.05	339,932	200	58.84
65-74									
White	59,545	32	53.74	66,388	44	66.28	125,933	76	60.35
Black	3,538	1	*	3,901	5	128.17	7,439	6	80.66
Hispanic	11,853	11	92.80	16,596	17	102.43	28,449	28	98.42
Asian/Other	11,112	18	161.99	14,634	11	75.17	25,746	29	112.64
Subtotal	86,048	62	72.05	101,519	78	76.83	187,567	140	74.64
75-84									
White	38,356	22	57.36	49,870	31	62.16	88,226	53	60.07
Black	1,536	1	*	2,107	2	*	3,643	3	*
Hispanic	6,964	4	*	10,231	7	68.42	17,195	11	63.97
Asian/Other	6,558	4	*	10,330	3	*	16,888	7	41.45
Subtotal	53,414	33	61.78	72,538	43	59.28	125,952	76	60.34
85+									
White	18,986	17	89.54	31,924	23	72.05	50,910	40	78.57
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	2	*	4,170	2	*	6,847	4	*
Asian/Other	2,311	1	*	3,562	1	*	5,873	2	*
Subtotal	24,517	20	81.58	40,568	26	64.09	65,085	46	70.68
Total**	**1,606,048**	**1,018**	**63.39**	**1,618,384**	**1,018**	**62.90**	**3,224,432**	**2,036**	**63.14**

* Rate not calculated on less than five incidents.

** Totals and subtotals include 34 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.8: Motor Vehicle Occupant Deaths by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	1	*	50,917	1	*	102,676	2	*
Asian/Other	17,891	0	-	16,898	0	-	34,789	0	-
Subtotal	117,268	1	*	113,875	1	*	231,143	2	*
5-9									
White	39,708	1	*	38,730	1	*	78,438	2	*
Black	5,684	0	-	5,365	0	-	11,049	0	-
Hispanic	45,246	0	-	44,392	1	*	89,638	1	*
Asian/Other	16,019	0	-	15,004	0	-	31,023	0	-
Subtotal	106,657	1	*	103,491	2	*	210,148	3	*
10-14									
White	38,827	0	-	41,546	1	*	80,373	1	*
Black	6,107	0	-	5,875	0	-	11,982	0	-
Hispanic	35,908	0	-	35,737	0	-	71,645	0	-
Asian/Other	17,674	0	-	16,461	0	-	34,135	0	-
Subtotal	98,516	0	-	99,619	1	*	198,135	1	*
15-19									
White	49,029	2	*	46,979	2	*	96,008	4	*
Black	7,826	1	*	7,006	0	-	14,832	1	*
Hispanic	47,882	2	*	43,983	3	*	91,865	5	5.44
Asian/Other	18,229	0	-	17,427	2	*	35,656	2	*
Subtotal	122,966	5	4.07	115,395	7	6.07	238,361	12	5.03
20-24									
White	64,018	9	14.06	51,308	2	*	115,326	11	9.54
Black	9,401	2	*	7,073	1	*	16,474	3	*
Hispanic	50,017	4	*	42,609	2	*	92,626	6	6.48
Asian/Other	20,809	0	-	19,276	0	-	40,085	0	-
Subtotal	144,245	15	10.40	120,266	5	4.16	264,511	20	7.56
25-34									
White	96,217	4	*	85,293	3	*	181,510	7	3.86
Black	13,032	1	*	11,324	0	-	24,356	1	*
Hispanic	92,468	4	*	83,479	1	*	175,947	5	2.84
Asian/Other	36,860	0	-	38,388	2	*	75,248	2	*
Subtotal	238,577	9	3.77	218,484	6	2.75	457,061	15	3.28
35-44									
White	107,262	2	*	98,700	2	*	205,962	4	*
Black	13,839	1	*	11,367	0	-	25,206	1	*
Hispanic	72,484	4	*	76,703	0	-	149,187	4	*
Asian/Other	33,806	1	*	38,114	0	-	71,920	1	*
Subtotal	227,391	8	3.52	224,884	2	*	452,275	10	2.21
45-54									
White	131,331	3	*	128,633	6	4.66	259,964	9	3.46
Black	13,099	0	-	11,907	0	-	25,006	0	-
Hispanic	48,730	3	*	55,717	2	*	104,447	5	4.79
Asian/Other	29,991	0	-	34,854	0	-	64,845	0	-
Subtotal	223,151	6	2.69	231,111	8	3.46	454,262	14	3.08

* Rate not calculated on less than five incidents.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.8: Motor Vehicle Occupant Deaths by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	1	*	112,591	1	*	221,481	2	*
Black	7,244	0	-	7,211	0	-	14,455	0	-
Hispanic	25,810	3	*	30,946	0	-	56,756	3	*
Asian/Other	21,354	2	*	25,886	0	-	47,240	2	*
Subtotal	163,298	6	3.67	176,634	1	*	339,932	7	2.06
65-74									
White	59,545	2	*	66,388	2	*	125,933	4	*
Black	3,538	1	*	3,901	0	-	7,439	1	*
Hispanic	11,853	1	*	16,596	0	-	28,449	1	*
Asian/Other	11,112	0	-	14,634	0	-	25,746	0	-
Subtotal	86,048	4	*	101,519	2	*	187,567	6	3.20
75-84									
White	38,356	3	*	49,870	5	13.04	88,226	8	9.07
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	3	*	10,231	0	-	17,195	3	*
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	6	11.23	72,538	5	9.36	125,952	11	8.73
85+									
White	18,986	9	47.40	31,924	2	*	50,910	11	21.61
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	9	36.71	40,568	2	*	65,085	11	16.90
Total**	**1,606,048**	**70**	**4.36**	**1,618,384**	**42**	**2.60**	**3,224,432**	**112**	**3.47**

* Rate not calculated on less than five incidents.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.9: Motorcycle Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	0	-	50,917	0	-	102,676	0	-
Asian/Other	17,891	0	-	16,898	0	-	34,789	0	-
Subtotal	117,268	-	-	113,875	0	-	231,143	0	-
5-9									
White	39,708	1	*	38,730	0	-	78,438	1	*
Black	5,684	0	-	5,365	0	-	11,049	0	-
Hispanic	45,246	0	-	44,392	0	-	89,638	0	-
Asian/Other	16,019	0	-	15,004	0	-	31,023	0	-
Subtotal	106,657	1	*	103,491	0	-	210,148	1	*
10-14									
White	38,827	0	-	41,546	0	-	80,373	0	-
Black	6,107	0	-	5,875	0	-	11,982	0	-
Hispanic	35,908	2	*	35,737	1	*	71,645	3	*
Asian/Other	17,674	0	-	16,461	0	-	34,135	0	-
Subtotal	98,516	2	*	99,619	1	*	198,135	3	*
15-19									
White	49,029	13	26.51	46,979	2	*	96,008	15	15.62
Black	7,826	2	*	7,006	0	-	14,832	2	*
Hispanic	47,882	3	*	43,983	2	*	91,865	5	5.44
Asian/Other	18,229	3	*	17,427	0	-	35,656	3	*
Subtotal	122,966	21	17.08	115,395	4	*	238,361	25	10.49
20-24									
White	64,018	51	79.67	51,308	9	17.54	115,326	60	52.03
Black	9,401	8	85.10	7,073	0	-	16,474	8	48.56
Hispanic	50,017	22	43.99	42,609	1	*	92,626	23	24.83
Asian/Other	20,809	15	72.08	19,276	2	*	40,085	17	42.41
Subtotal	144,245	97	67.25	120,266	12	9.98	264,511	109	41.21
25-34									
White	96,217	77	80.03	85,293	4	*	181,510	81	44.63
Black	13,032	7	53.71	11,324	0	-	24,356	7	28.74
Hispanic	92,468	27	29.20	83,479	3	*	175,947	30	17.05
Asian/Other	36,860	14	37.98	38,388	0	-	75,248	14	18.61
Subtotal	238,577	125	52.39	218,484	8	3.66	457,061	133	29.10
35-44									
White	107,262	48	44.75	98,700	9	9.12	205,962	57	27.68
Black	13,839	10	72.26	11,367	2	*	25,206	12	47.61
Hispanic	72,484	13	17.93	76,703	2	*	149,187	15	10.05
Asian/Other	33,806	5	14.79	38,114	1	*	71,920	6	8.34
Subtotal	227,391	76	33.42	224,884	14	6.23	452,275	90	19.90
45-54									
White	131,331	76	57.87	128,633	12	9.33	259,964	88	33.85
Black	13,099	2	*	11,907	0	-	25,006	2	*
Hispanic	48,730	5	10.26	55,717	1	*	104,447	6	5.74
Asian/Other	29,991	2	*	34,854	1	*	64,845	3	*
Subtotal	223,151	86	38.54	231,111	17	7.36	454,262	103	22.67

* Rate not calculated on less than five incidents.

** Totals and subtotals include 7 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.9: Motorcycle Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	36	33.06	112,591	4	*	221,481	40	18.06
Black	7,244	2	*	7,211	0	-	14,455	2	*
Hispanic	25,810	7	27.12	30,946	0	-	56,756	7	12.33
Asian/Other	21,354	2	*	25,886	0	-	47,240	2	*
Subtotal	163,298	48	29.39	176,634	4	*	339,932	52	15.30
65-74									
White	59,545	15	25.19	66,388	0	-	125,933	15	11.91
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	0	-	16,596	0	-	28,449	0	-
Asian/Other	11,112	0	-	14,634	0	-	25,746	0	-
Subtotal	86,048	15	17.43	101,519	0	-	187,567	15	8.00
75-84									
White	38,356	4	*	49,870	0	-	88,226	4	*
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	0	-	17,195	0	-
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	4	*	72,538	0	-	125,952	4	*
85+									
White	18,986	1	*	31,924	0	-	50,910	1	*
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	1	*	4,170	0	-	6,847	1	*
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	2	*	40,568	0	-	65,085	2	*
Total**	**1,606,048**	**477**	**29.70**	**1,618,384**	**60**	**3.71**	**3,224,432**	**537**	**16.65**

*Rate not calculated on less than five incidents.

** Totals and subtotals include 7 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 5.10: Pedalcycle Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	2	*	82,264	2	*
Black	5,795	0	-	5,619	0	-	11,414	0	-
Hispanic	51,759	5	9.66	50,917	0	-	102,676	5	4.87
Asian/Other	17,891	0	-	16,898	1	*	34,789	1	*
Subtotal	117,268	5	4.26	113,875	4	*	231,143	9	3.89
5-9									
White	39,708	3	*	38,730	0	-	78,438	3	*
Black	5,684	0	-	5,365	1	*	11,049	1	*
Hispanic	45,246	6	13.26	44,392	0	-	89,638	6	6.69
Asian/Other	16,019	9	56.18	15,004	1	*	31,023	10	32.23
Subtotal	106,657	18	16.88	103,491	2	*	210,148	20	9.52
10-14									
White	38,827	18	46.36	41,546	4	*	80,373	22	27.37
Black	6,107	1	*	5,875	0	-	11,982	1	*
Hispanic	35,908	12	33.42	35,737	0	-	71,645	12	16.75
Asian/Other	17,674	14	79.21	16,461	0	-	34,135	14	41.01
Subtotal	98,516	47	47.71	99,619	4	*	198,135	51	25.74
15-19									
White	49,029	22	44.87	46,979	4	*	96,008	26	27.08
Black	7,826	0	-	7,006	0	-	14,832	0	-
Hispanic	47,882	18	37.59	43,983	2	*	91,865	20	21.77
Asian/Other	18,229	13	71.31	17,427	3	*	35,656	16	44.87
Subtotal	122,966	54	43.91	115,395	9	7.80	238,361	63	26.43
20-24									
White	64,018	23	35.93	51,308	6	11.69	115,326	29	25.15
Black	9,401	2	*	7,073	0	-	16,474	2	*
Hispanic	50,017	3	*	42,609	1	*	92,626	4	*
Asian/Other	20,809	3	*	19,276	1	*	40,085	4	*
Subtotal	144,245	31	21.49	120,266	8	6.65	264,511	39	14.74
25-34									
White	96,217	29	30.14	85,293	8	9.38	181,510	37	20.38
Black	13,032	2	*	11,324	0	-	24,356	2	*
Hispanic	92,468	11	11.90	83,479	2	*	175,947	13	7.39
Asian/Other	36,860	7	18.99	38,388	0	-	75,248	7	9.30
Subtotal	238,577	50	20.96	218,484	11	5.03	457,061	61	13.35
35-44									
White	107,262	41	38.22	98,700	7	7.09	205,962	48	23.31
Black	13,839	2	*	11,367	0	-	25,206	2	*
Hispanic	72,484	8	11.04	76,703	0	-	149,187	8	5.36
Asian/Other	33,806	3	*	38,114	0	-	71,920	3	*
Subtotal	227,391	54	23.75	224,884	7	3.11	452,275	61	13.49
45-54									
White	131,331	61	46.45	128,633	9	7.00	259,964	70	26.93
Black	13,099	4	*	11,907	1	*	25,006	5	20.00
Hispanic	48,730	13	26.68	55,717	1	*	104,447	14	13.40
Asian/Other	29,991	3	*	34,854	1	*	64,845	4	*
Subtotal	223,151	83	37.19	231,111	12	5.19	454,262	95	20.91

*Rate not calculated on less than five incidents.

** Totals and subtotals include two with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 5.10: Pedalcycle Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	47	43.16	112,591	5	4.44	221,481	52	23.48
Black	7,244	3	*	7,211	0	-	14,455	3	*
Hispanic	25,810	6	23.25	30,946	0	-	56,756	6	10.57
Asian/Other	21,354	3	*	25,886	0	-	47,240	3	*
Subtotal	163,298	59	36.13	176,634	5	2.83	339,932	64	18.83
65-74									
White	59,545	12	20.15	66,388	2	*	125,933	14	11.12
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	3	*	16,596	0	-	28,449	3	*
Asian/Other	11,112	0	-	14,634	0	-	25,746	0	-
Subtotal	86,048	15	17.43	101,519	2	*	187,567	17	9.06
75-84									
White	38,356	11	28.68	49,870	0	-	88,226	11	12.47
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	0	-	17,195	0	-
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	11	20.59	72,538	0	-	125,952	11	8.73
85+									
White	18,986	2	*	31,924	1	*	50,910	3	*
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	2	*	40,568	1	*	65,085	3	*
Total	**1,606,048**	**429**	**26.71**	**1,618,384**	**65**	**4.02**	**3,224,432**	**494**	**15.32**

*Rate not calculated on less than five incidents.

** Totals and subtotals include 8 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services. San Diego Trauma Registry and Medical Examiner's Data, 2010. Population estimates, SANDAG.

Table 5.11: Pedestrian Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	0	-	40,441	0	-	82,264	0	-
Black	5,795	3	*	5,619	0	-	11,414	3	*
Hispanic	51,759	8	15.46	50,917	2	*	102,676	10	9.74
Asian/Other	17,891	0	-	16,898	2	*	34,789	2	*
Subtotal	117,268	12	10.23	113,875	4	*	231,143	16	6.92
5-9									
White	39,708	1	*	38,730	3	*	78,438	4	*
Black	5,684	1	*	5,365	1	*	11,049	2	*
Hispanic	45,246	13	28.73	44,392	4	*	89,638	17	18.97
Asian/Other	16,019	1	*	15,004	1	*	31,023	2	*
Subtotal	106,657	16	15.00	103,491	9	8.70	210,148	25	11.90
10-14									
White	38,827	4	*	41,546	2	*	80,373	6	7.47
Black	6,107	1	*	5,875	1	*	11,982	2	*
Hispanic	35,908	11	30.63	35,737	6	16.79	71,645	17	23.73
Asian/Other	17,674	2	*	16,461	1	*	34,135	3	*
Subtotal	98,516	19	19.29	99,619	11	11.04	198,135	30	15.14
15-19									
White	49,029	12	24.48	46,979	7	14.90	96,008	19	19.79
Black	7,826	7	89.45	7,006	1	*	14,832	8	53.94
Hispanic	47,882	19	39.68	43,983	3	*	91,865	22	23.95
Asian/Other	18,229	6	32.91	17,427	5	28.69	35,656	11	30.85
Subtotal	122,966	44	35.78	115,395	16	13.87	238,361	60	25.17
20-24									
White	64,018	21	32.80	51,308	7	13.64	115,326	28	24.28
Black	9,401	3	*	7,073	3	*	16,474	6	36.42
Hispanic	50,017	6	12.00	42,609	2	*	92,626	8	8.64
Asian/Other	20,809	5	24.03	19,276	1	*	40,085	6	14.97
Subtotal	144,245	35	24.26	120,266	13	10.81	264,511	48	18.15
25-34									
White	96,217	21	21.83	85,293	13	15.24	181,510	34	18.73
Black	13,032	3	*	11,324	1	*	24,356	4	*
Hispanic	92,468	8	8.65	83,479	7	8.39	175,947	15	8.53
Asian/Other	36,860	4	*	38,388	7	18.23	75,248	11	14.62
Subtotal	238,577	39	16.35	218,484	28	12.82	457,061	67	14.66
35-44									
White	107,262	13	12.12	98,700	9	9.12	205,962	22	10.68
Black	13,839	1	*	11,367	0	-	25,206	1	*
Hispanic	72,484	2	*	76,703	6	7.82	149,187	8	5.36
Asian/Other	33,806	3	*	38,114	0	-	71,920	3	*
Subtotal	227,391	19	8.36	224,884	15	6.67	452,275	34	7.52
45-54									
White	131,331	25	19.04	128,633	6	4.66	259,964	31	11.92
Black	13,099	3	*	11,907	3	*	25,006	6	23.99
Hispanic	48,730	15	30.78	55,717	3	*	104,447	18	17.23
Asian/Other	29,991	0	-	34,854	6	17.21	64,845	6	9.25
Subtotal	223,151	44	19.72	231,111	18	7.79	454,262	62	13.65

* Rate not calculated on less than five incidents.

** Totals and subtotals include ten with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.11: Pedestrian Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	17	15.61	112,591	10	8.88	221,481	27	12.19
Black	7,244	0	-	7,211	1	*	14,455	1	*
Hispanic	25,810	11	42.62	30,946	6	19.39	56,756	17	29.95
Asian/Other	21,354	1	*	25,886	3	*	47,240	4	*
Subtotal	163,298	30	18.37	176,634	20	11.32	339,932	50	14.71
65-74									
White	59,545	13	21.83	66,388	4	*	125,933	17	13.50
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	3	*	16,596	3	*	28,449	6	21.09
Asian/Other	11,112	2	*	14,634	3	*	25,746	5	19.42
Subtotal	86,048	19	22.08	101,519	10	9.85	187,567	29	15.46
75-84									
White	38,356	6	15.64	49,870	5	13.04	88,226	11	12.47
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	0	-	10,231	1	*	17,195	1	*
Asian/Other	6,558	3	*	10,330	3	*	16,888	6	35.53
Subtotal	53,414	9	16.85	72,538	9	16.85	125,952	18	14.29
85+									
White	18,986	4	*	31,924	1	*	50,910	5	9.82
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	4	*	40,568	1	*	65,085	5	7.68
Total**	**1,606,048**	**290**	**18.06**	**1,618,384**	**154**	**9.52**	**3,224,432**	**444**	**13.77**

* Rate not calculated on less than five incidents.

** Totals and subtotals include ten with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Who is at Greatest Risk of Other Unintentional Death and Injury? (Rates = Number per 100,000 Population)

- **Severe Injuries due to Falls:** The highest rates of severe injuries from falls were seen in the oldest age groups. White males aged 85 and older had the highest injury rates from falls (1,042.9).

- **Deaths due to falls:** Fall rates could only be calculated for Hispanic men age 45 to 54, and for White men and women age 55 and older. The highest fall related death rate was among White men age 85 and older (368.7) **No table appears.**

- **Severe Injury due to Sports and Recreation:** The highest rates of Sports/Recreation injury were in white males 15-19 years (201.9).

- **Death due to Sports and Recreation:** Number was too low to calculate all age, gender, and race/ethnicity breakdowns. **No Table Appears.**

Table 5.12: Fall Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	39	93.25	40,441	41	101.38	82,264	80	97.25
Black	5,795	7	120.79	5,619	3	*	11,414	10	87.61
Hispanic	51,759	66	127.51	50,917	44	86.42	102,676	110	107.13
Asian/Other	17,891	35	195.63	16,898	26	153.86	34,789	61	175.34
Subtotal	117,268	151	128.76	113,875	115	100.99	231,143	266	115.08
5-9									
White	39,708	15	37.78	38,730	4	*	78,438	19	24.22
Black	5,684	4	*	5,365	3	*	11,049	7	63.35
Hispanic	45,246	26	57.46	44,392	8	18.02	89,638	34	37.93
Asian/Other	16,019	9	56.18	15,004	4	*	31,023	13	41.90
Subtotal	106,657	54	50.63	103,491	19	18.36	210,148	73	34.74
10-14									
White	38,827	15	38.63	41,546	9	21.66	80,373	24	29.86
Black	6,107	4	*	5,875	2	*	11,982	6	50.08
Hispanic	35,908	6	16.71	35,737	7	19.59	71,645	13	18.15
Asian/Other	17,674	3	*	16,461	5	30.37	34,135	8	23.44
Subtotal	98,516	28	28.42	99,619	24	24.09	198,135	52	26.24
15-19									
White	49,029	29	59.15	46,979	16	34.06	96,008	45	46.87
Black	7,826	6	76.67	7,006	0	-	14,832	6	40.45
Hispanic	47,882	17	35.50	43,983	11	25.01	91,865	28	30.48
Asian/Other	18,229	7	38.40	17,427	4	*	35,656	11	30.85
Subtotal	122,966	60	48.79	115,395	31	26.86	238,361	91	38.18
20-24									
White	64,018	58	90.60	51,308	20	38.98	115,326	78	67.63
Black	9,401	6	63.82	7,073	5	70.69	16,474	11	66.77
Hispanic	50,017	19	37.99	42,609	8	18.78	92,626	27	29.15
Asian/Other	20,809	10	48.06	19,276	2	*	40,085	12	29.94
Subtotal	144,245	94	65.17	120,266	35	29.10	264,511	129	48.77
25-34									
White	96,217	81	84.18	85,293	26	30.48	181,510	107	58.95
Black	13,032	9	69.06	11,324	1	*	24,356	10	41.06
Hispanic	92,468	44	47.58	83,479	8	9.58	175,947	52	29.55
Asian/Other	36,860	16	43.41	38,388	10	26.05	75,248	26	34.55
Subtotal	238,577	153	64.13	218,484	48	21.97	457,061	201	43.98
35-44									
White	107,262	87	81.11	98,700	34	34.45	205,962	121	58.75
Black	13,839	12	86.71	11,367	5	43.99	25,206	17	67.44
Hispanic	72,484	56	77.26	76,703	11	14.34	149,187	67	44.91
Asian/Other	33,806	13	38.45	38,114	12	31.48	71,920	25	34.76
Subtotal	227,391	173	76.08	224,884	62	27.57	452,275	235	51.96
45-54									
White	131,331	179	136.30	128,633	68	52.86	259,964	247	95.01
Black	13,099	18	137.42	11,907	11	92.38	25,006	29	115.97
Hispanic	48,730	52	106.71	55,717	16	28.72	104,447	68	65.10
Asian/Other	29,991	14	46.68	34,854	8	22.95	64,845	22	33.93
Subtotal	223,151	267	119.65	231,111	103	44.57	454,262	370	81.45

* Rate not calculated on less than five incidents.

** Totals and subtotals include 44 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.12: Fall Injuries by Age Group, Race/Ethnicity and Gender: 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	196	180.00	112,591	99	87.93	221,481	295	133.19
Black	7,244	15	207.07	7,211	8	110.94	14,455	23	159.11
Hispanic	25,810	41	158.85	30,946	18	58.17	56,756	59	103.95
Asian/Other	21,354	18	84.29	25,886	17	65.67	47,240	35	74.09
Subtotal	163,298	272	166.57	176,634	144	81.52	339,932	416	122.38
65-74									
White	59,545	170	285.50	66,388	125	188.29	125,933	295	234.25
Black	3,538	7	197.85	3,901	6	153.81	7,439	13	174.75
Hispanic	11,853	21	177.17	16,596	20	120.51	28,449	41	144.12
Asian/Other	11,112	10	89.99	14,634	25	170.84	25,746	35	135.94
Subtotal	86,048	209	242.89	101,519	178	175.34	187,567	387	206.33
75-84									
White	38,356	200	521.43	49,870	266	693.50	88,226	466	528.19
Black	1,536	8	520.83	2,107	5	325.52	3,643	13	356.85
Hispanic	6,964	39	560.02	10,231	30	430.79	17,195	69	401.28
Asian/Other	6,558	38	579.44	10,330	26	396.46	16,888	64	378.97
Subtotal	53,414	290	542.93	72,538	330	617.82	125,952	620	492.25
85+									
White	18,986	198	1,042.87	31,924	293	917.80	50,910	491	964.45
Black	543	3	*	912	5	548.25	1,455	8	549.83
Hispanic	2,677	18	672.39	4,170	39	935.25	6,847	57	832.48
Asian/Other	2,311	16	692.34	3,562	24	673.78	5,873	40	681.08
Subtotal	24,517	236	962.60	40,568	365	899.72	65,085	601	923.41
Total**	**1,606,048**	**1,987**	**123.72**	**1,618,384**	**1,454**	**89.84**	**3,224,432**	**3,441**	**106.72**

* Rate not calculated on less than five incidents.

** Totals and subtotals include 44 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.13: Sports/Recreation Injuries by Age Group, Race/Ethnicity and Gender: 2010

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
Under 5									
White	41,823	3	*	40,441	3	*	82,264	6	7.29
Black	5,795	2	*	5,619	0	-	11,414	2	*
Hispanic	51,759	3	*	50,917	2	*	102,676	5	4.87
Asian/Other	17,891	0	-	16,898	1	*	34,789	1	*
Subtotal	117,268	8	6.82	113,875	6	5.27	231,143	14	6.06
5-9									
White	39,708	11	27.70	38,730	3	*	78,438	14	17.85
Black	5,684	1	*	5,365	0	-	11,049	1	*
Hispanic	45,246	9	19.89	44,392	4	*	89,638	13	14.50
Asian/Other	16,019	6	37.46	15,004	2	*	31,023	8	25.79
Subtotal	106,657	27	25.31	103,491	9	8.70	210,148	36	17.13
10-14									
White	38,827	44	113.32	41,546	19	45.73	80,373	63	78.38
Black	6,107	5	81.87	5,875	0	-	11,982	5	41.73
Hispanic	35,908	23	64.05	35,737	9	25.18	71,645	32	44.66
Asian/Other	17,674	17	96.19	16,461	10	60.75	34,135	27	79.10
Subtotal	98,516	91	92.37	99,619	38	38.15	198,135	129	65.11
15-19									
White	49,029	99	201.92	46,979	28	59.60	96,008	127	132.28
Black	7,826	2	*	7,006	0	-	14,832	2	*
Hispanic	47,882	25	52.21	43,983	4	*	91,865	29	31.57
Asian/Other	18,229	14	76.80	17,427	5	28.69	35,656	19	53.29
Subtotal	122,966	145	117.92	115,395	37	32.06	238,361	182	76.35
20-24									
White	64,018	51	79.67	51,308	13	25.34	115,326	64	55.49
Black	9,401	0	-	7,073	0	-	16,474	0	-
Hispanic	50,017	12	23.99	42,609	5	11.73	92,626	17	18.35
Asian/Other	20,809	2	*	19,276	2	*	40,085	4	*
Subtotal	144,245	67	46.45	120,266	20	16.63	264,511	87	32.89
25-34									
White	96,217	39	40.53	85,293	15	17.59	181,510	54	29.75
Black	13,032	1	*	11,324	0	-	24,356	1	*
Hispanic	92,468	14	15.14	83,479	2	*	175,947	16	9.09
Asian/Other	36,860	5	13.56	38,388	3	*	75,248	8	10.63
Subtotal	238,577	59	24.73	218,484	23	10.53	457,061	82	17.94
35-44									
White	107,262	54	50.34	98,700	13	13.17	205,962	67	32.53
Black	13,839	1	*	11,367	1	*	25,206	2	*
Hispanic	72,484	11	15.18	76,703	1	*	149,187	12	8.04
Asian/Other	33,806	4	*	38,114	2	*	71,920	6	8.34
Subtotal	227,391	72	31.66	224,884	18	8.00	452,275	90	19.90
45-54									
White	131,331	42	31.98	128,633	28	21.77	259,964	70	26.93
Black	13,099	0	-	11,907	0	-	25,006	0	-
Hispanic	48,730	4	*	55,717	2	*	104,447	6	5.74
Asian/Other	29,991	1	*	34,854	0	-	64,845	1	*
Subtotal	223,151	49	21.96	231,111	31	13.41	454,262	80	17.61

* Rate not calculated on less than five incidents.

** Totals and subtotals include 19 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Table 5.13: Sports/Recreation Injuries by Age Group, Race/Ethnicity and Gender : 2010 (Continued)

	Males			Females			Total		
	Population	Number	Rate	Population	Number	Rate	Population	Number	Rate
55-64									
White	108,890	16	14.69	112,591	18	15.99	221,481	34	15.35
Black	7,244	0	-	7,211	0	-	14,455	0	-
Hispanic	25,810	4	*	30,946	0	-	56,756	4	*
Asian/Other	21,354	1	*	25,886	1	*	47,240	2	*
Subtotal	163,298	21	12.86	176,634	19	10.76	339,932	40	11.77
65-74									
White	59,545	8	13.44	66,388	5	7.53	125,933	13	10.32
Black	3,538	0	-	3,901	0	-	7,439	0	-
Hispanic	11,853	1	*	16,596	0	-	28,449	1	*
Asian/Other	11,112	0	-	14,634	1	*	25,746	1	*
Subtotal	86,048	9	10.46	101,519	6	5.91	187,567	15	8.00
75-84									
White	38,356	1	*	49,870	3	*	88,226	4	*
Black	1,536	0	-	2,107	0	-	3,643	0	-
Hispanic	6,964	1	*	10,231	0	-	17,195	1	*
Asian/Other	6,558	0	-	10,330	0	-	16,888	0	-
Subtotal	53,414	2	*	72,538	3	*	125,952	5	3.97
85+									
White	18,986	0	-	31,924	0	-	50,910	0	-
Black	543	0	-	912	0	-	1,455	0	-
Hispanic	2,677	0	-	4,170	0	-	6,847	0	-
Asian/Other	2,311	0	-	3,562	0	-	5,873	0	-
Subtotal	24,517	0	-	40,568	0	-	65,085	0	-
Total**	**1,606,048**	**550**	**34.25**	**1,618,384**	**210**	**12.98**	**3,224,432**	**760**	**23.57**

* Rate not calculated on less than five incidents.

** Totals and subtotals include 19 with unspecified age, gender, and/or race/ethnicity.

Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, San Diego Trauma Registry and Medical Examiner's Data, 2010; Population Estimates, SANDAG

Abbreviated Injury Scale (AIS): A scale created to describe individual traumatic injuries. AIS scores obtain a value from each of 6 body areas: 1) head or neck; 2) face; 3) chest; 4) abdomen/pelvic contents; 5) extremities/pelvic girdle; and 6) external. For each body region a severity code is assigned which describes the injuries: 1) minor; 2) moderate; 3) serious; 4) severe; 5) critical; 6) maximum injury with little chance of survival, and 9) unknown.

Confidence Level (95%): Statistical measure used when comparing the differences between a set of numbers to determine if they are statistically significant or not. A 95% confidence level was used in this report ($p < .05$), therefore you could say that there was less than a five percent probability that the differences were due to chance if they were reported as statistically significant.

Geographic Areas: The geographic areas used in the analysis of the data are the Health and Human Services Agency regions (HHSA regions) and the subregional areas (SRA) of San Diego County as defined by the San Diego Association of Governments (SANDAG). See Appendix D.

Mechanism of Injury: This report is based on classifications of injury etiology as follows:

Motor Vehicle Occupant	driver or passenger, not motorcycle
Motorcycle	driver or passenger of motorcycle/moped
Pedalcycle	pedalcyclist, traffic or non-traffic
Pedestrian	person involved in a motor vehicle collision who was on foot, or in or operating a pedestrian conveyance, e.g., baby carriage, roller skates, wheelchair, scooter, skateboard.
Other vehicle	railway accident motor vehicle other or unknown other road vehicle Aircraft, other vehicle
Falls	fall, steps fall, ladder/scaffold fall, structure fall, into hole/swimming pool, etc. fall, cliff fall from standing (must be witnessed) other fall/unknown
Self Inflicted/Suicides	suicide attempt (hanging, suffocation) self inflicted firearms/ explosive self inflicted cutting/piercing self inflicted jump from high place self inflicted suicide attempt, other

Assaults/Homicides	fall, pushed from vehicle assault, unarmed fight, brawl, etc. rape assault by firearm/explosive assault by cutting/piercing child battering other assault/suspected non-accidental assault by multiple causes (firearms/stabbing/etc.)
Sports & Recreation Activities	scooter/skateboard/carriage/snow skier off road vehicle riding animals water sports sports (hit, kicked or struck) fall from tree/playground equipment
Other	dog bite injured by animal, not dog bite struck by falling object struck by machinery/object (caught, crushed, cut, etc.) cutting instruments (lawn mowers, power tools, appliances, knives, swords, saws, glass) explosion of pressure vessel BB/pellet gun (assault and accidental) bow/cross bow (assault and accidental) firearms (accident, not assault) explosive material (fireworks, gas, bomb, accident) hot substance, caustic, steam electric current cave in (dirt, structures) other unspecified accident legal intervention
Unknown	mechanism left blank or "unknown". undetermined intent of injury

Incidence: The number of occurrences for the specific injury type. Incidence should not be used to compare different racial/ethnic groups, age groups or geographic areas. For these comparisons, use rates which take into account differences in population sizes.

Injury: For the purposes of this report injury refers to unintentional or intentional damage to the body resulting from acute exposure to mechanical energy.

Injury Severity Score (ISS): A modification of the AIS, the ISS is an anatomic score developed to identify multiple traumatic injuries. The ISS is obtained by calculating the sum of the squared values of the highest AIS code in each of the three most severely injured regions of the body. AIS scores up to 5 are squared, so that the highest ISS attainable is 75. An AIS score of 6 in any body region is assigned as ISS of 75.

Race/Ethnicity: Race/ethnicity is calculated for this report as Hispanic, non-Hispanic White, non-Hispanic Black, non-Hispanic Asian/Other based on SANDAG estimates of population for January 2001.

Rate: Calculated as incidence per 100,000 population. Rates were calculated using January 2001 population estimates provided by the San Diego Association of Governments (SANDAG). Rates were not calculated for categories with less than five occurrences, due to instability.

Rate = (Incidence/Population) X 100,000

SANDAG: San Diego Association of Governments.

Scene Time: The total time the patient was not actually being transported to either the receiving hospital or the rendezvous point (reflects the total time an ambulance spends on scene).

Source of Data: All incidence data is from the San Diego County Trauma Registry. This data includes both deaths and severe traumatic injuries. To be included in the trauma registry a patient must suffer from a traumatic injury and: have a length of stay in the hospital greater than or equal to 24 hours; be an interfacility transfer from or to an acute care facility; or die from the injury. A patient who dies of a traumatic injury on scene, at a non-trauma facility, or at a trauma center is included in the Medical Examiner's database.

Statistical Significance: A number is said to be statistically significant if it is "significantly" larger or smaller than would be expected by chance. For this report statistical significance is measured using a 95% confidence level, meaning that with 95% certainty you can say that the numbers did not occur by chance, giving us a statistical significance of $p < .05$.

Trauma Center Monthly Reports: Summary reports submitted to EMS by each designated trauma center hospital. These forms are intended to serve as a record of the hospital's trauma service activity for that month. This activity includes admissions, discharges, deaths, mode of arrival and final dispositions.

Years Potential Life Lost (YPLL): YPLL calculates the years of life lost due to a death using the average life expectancy as an estimate for the total length of life. Life expectancy was derived from the Vital Statistics Life Tables (Centers for Disease Control and Prevention). For age groups, YPLL was calculated using the life expectancy for the median age for the group. YPLL = (Expected years of life - median age) X Number of deaths

Appendix A

Table A.1: Leading Causes of Traumatic Injury by HHSA Region: 2010

HHSA Region	Rank of Cause of Injury				
	1	2	3	4	5
North Coastal	Falls 215	MV Occupant 127	Assaults 64	Sport/Rec 46	Pedestrian 31
North Central	Falls 521	MV Occupant 233	Assaults 106	Pedalcycle 85	Pedestrian 63
Central	Falls 762	Assaults 461	MV Occupant 319	Other 151	Pedestrian 89
South	Falls 479	MV Occupant 236	Assaults 177	Other 91	Pedestrian 52
East	Falls 324	MV Occupant 124	Assaults 64	Sport/Rec 32	Motorcycle 26
North Inland	Falls 198	MV Occupant 93	Sport/Rec 76	Motorcycle 53	Assaults 29
Unknown	Falls 943	MV Occupant 905	Assaults 510	Sport/Rec 492	Motorcycle 270
Total	Falls 3442	MV Occupant 2037	Assaults 1411	Sport/Rec 761	Other 565

Source: County of San Diego Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010

Leading Causes of Traumatic Death by HHSA Region: 2010

HHSA Region	Rank of Cause of Injury				
	1	2	3	4	5
North Coastal	Falls 58	Suicide 27	MV Occupant 10	Pedestrian 8	Homicide 8
North Central	Falls 62	Suicide 45	MV Occupant 15	Pedestrian 7	Homicide 5
Central	Falls 37	Suicide 33	Homicide 20	MV Occupant 19	Pedestrian 13
South	Falls 52	Suicide 20	MV Occupant 10	Homicide 9	Pedestrian 8
East	Falls 70	Suicide 33	MV Occupant 26	Pedestrian 10	Motorcycle 5
North Inland	Falls 68	Suicide 27	MV Occupant 19	Motorcycle 9	Pedestrian 8
Unknown	Falls 51	MV Occupant 14	Homicide 11	Other 11	Pedestrian 7
Total	Falls 398	Suicide 189	MV Occupant 113	Homicide 63	Pedestrian 61

Source: County of San Diego Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010

Leading Causes of Traumatic Injury by Age Group of Victim: 2010

Age Group of Victim	Rank of Cause of Injury				
	1	2	3	4	5
0-4	Falls 266	MV Occupant 40	Other 38	Assaults 34	Pedestrian 17
5-9	Falls 73	MV Occupant 53	Sport/Rec 36	Pedestrian 25	Other 25
10-14	Sport/Rec 129	Falls 52	Pedalcycle 51	Other 44	MV Occupant 43
15-19	Assaults 215	MV Occupant 188	Sport/Rec 182	Falls 91	Pedalcycle 63
20-24	MV Occupant 347	Assaults 320	Falls 129	Motorcycle 109	Sport/Rec 87
25-34	MV Occupant 387	Assaults 346	Falls 202	Motorcycle 133	Other 86
35-44	MV Occupant 252	Falls 235	Assaults 230	Motorcycle 90	Sport/Rec 90
45-54	Falls 370	MV Occupant 265	Assaults 160	Motorcycle 103	Other 103
55-64	Falls 416	MV Occupant 200	Pedalcycle 64	Assaults 63	Other 59
65-74	Falls 387	MV Occupant 140	Pedestrian 29	Other Vehicle 21	Other 19
75-84	Falls 620	MV Occupant 76	Other 27	Other Vehicle 19	Pedestrian 18
85+	Falls 601	MV Occupant 46	Other 18	Other Vehicle 6	Pedestrian 5
Total	Falls 3442	MV Occupant 2037	Assaults 1411	Sport/Rec 761	Other 565

Source: County of San Diego Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010
Note: Causes of injury with fewer than five incidents are excluded.

Appendix A

Leading Causes of Traumatic Death by Age Group of Victim: 2010

Age Group of Victim	Rank of Cause of Injury				
	1	**2**	**3**	**4**	5
0-4	Pedestrian <5	MV Occupant <5	Other <5	Homicide <5	
5-9	MV Occupant <5	Pedestrian <5	Other Vehicle <5		
10-14	Suicide <5	MV Occupant <5	Homicide <5	Sport/Rec <5	
15-19	MV Occupant 12	Homicide 9	Suicide 6	Pedestrian <5	Other Vehicle <5
20-24	MV Occupant 20	Suicide 19	Homicide 9	Pedestrian 6	Other Vehicle <5
25-34	Suicide 18	MV Occupant 15	Homicide 13	Pedestrian 10	Motorcycle 5
35-44	Suicide 15	Pedestrian 11	MV Occupant 10	Homicide 8	Motorcycle 7
45-54	Suicide 38	Falls 17	MV Occupant 14	Motorcycle 11	Pedestrian 10
55-64	Suicide 40	Falls 34	Other 12	Pedestrian 8	MV Occupant 7
65-74	Falls 49	Suicide 20	MV Occupant 6	Pedestrian 5	Homicide 5
75-84	Falls 104	Suicide 16	MV Occupant 11	Other 7	Pedestrian <5
85+	Falls 188	Suicide 15	MV Occupant 11	Other 6	Pedestrian <5
Total	Falls 398	Suicide 189	MV Occupant 113	Homicide 63	Pedestrian 61

Source: County of San Diego Health and Human Services Agency, Emergency Medical Services, San Diego County Trauma Registry, 2010
Note: Numbers not shown for fewer than five incidents.

Table B.1: Motor Vehicle Occupant Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	206	116.00	8	4.50	214	120.50
Peninsula	48,113	8	16.63	<5	*	10	20.78
Coronado	23,916	8	33.45	<5	*	10	41.81
National City	57,755	63	109.08	<5	*	65	112.54
Southeast San Diego	161,320	40	24.80	5	3.10	45	27.89
Mid-City	171,490	73	42.57	6	3.50	79	46.07
Kearny Mesa	178,974	66	36.88	5	2.79	71	39.67
Coastal	94,187	83	88.12	<5	*	86	91.31
University	51,220	34	66.38	<5	*	36	70.29
Del Mar-Mira Mesa	143,024	27	18.88	<5	*	29	20.28
North San Diego	148,211	28	18.89	5	3.37	33	22.27
Poway	87,049	13	14.93	<5	*	13	14.93
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	10	11.84	<5	*	11	13.03
Sweetwater	95,382	21	22.02	<5	*	22	23.07
Chula Vista	156,517	113	72.20	<5	*	117	74.75
South Bay	141,049	30	21.27	<5	*	31	21.98
Jamul	17,995	5	27.79	<5	*	8	44.46
Spring Valley	62,290	21	33.71	<5	*	22	35.32
Lemon Grove	26,131	18	68.88	<5	*	20	76.54
La Mesa	72,034	11	15.27	<5	*	11	15.27
El Cajon	103,740	13	12.53	<5	*	14	13.50
Santee	57,905	6	10.36	<5	*	7	12.09
Lakeside	44,185	31	70.16	<5	*	35	79.21
Harbison Crest	65,725	10	15.21	<5	*	11	16.74
Alpine	17,729	<5	*	6	33.84	8	45.12
Ramona	35,966	6	16.68	<5	*	7	19.46
San Dieguito	90,068	23	25.54	<5	*	24	26.65
Carlsbad	106,263	29	27.29	<5	*	29	27.29
Oceanside	182,869	47	25.70	5	2.73	52	28.44
Pendleton	44,282	11	24.84	<5	*	14	31.62
Escondido	176,448	19	10.77	<5	*	23	13.04
San Marcos	87,848	8	9.11	<5	*	8	9.11
Vista	116,393	16	13.75	<5	*	18	15.46
Valley Center	16,209	<5	*	<5	*	5	30.85
Pauma	4,096	<5	*	<5	*	5	122.07
Fallbrook	53,294	13	24.39	<5	*	16	30.02
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	5	65.20	9	117.36
Anza-Borrego Springs	8,511	8	94.00	<5	*	9	105.75
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	901		13		914	
Total	3,224,432	2037	63.17	113	3.50	2150	66.68

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.2: Motorcycle Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	40	22.52	<5	*	42	23.65
Peninsula	48,113	<5	*	<5	*	<5	*
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	10	17.31	<5	*	10	17.31
Southeast San Diego	161,320	6	3.72	<5	*	6	3.72
Mid-City	171,490	16	9.33	<5	*	17	9.91
Kearny Mesa	178,974	16	8.94	<5	*	19	10.62
Coastal	94,187	8	8.49	<5	*	9	9.56
University	51,220	12	23.43	<5	*	12	23.43
Del Mar-Mira Mesa	143,024	8	5.59	<5	*	8	5.59
North San Diego	148,211	<5	*	<5	*	<5	*
Poway	87,049	<5	*	<5	*	<5	*
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	7	8.29	<5	*	7	8.29
Sweetwater	95,382	8	8.39	<5	*	8	8.39
Chula Vista	156,517	14	8.94	<5	*	15	9.58
South Bay	141,049	10	7.09	<5	*	11	7.80
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	7	11.24	<5	*	7	11.24
Lemon Grove	26,131	<5	*	<5	*	<5	*
La Mesa	72,034	<5	*	<5	*	<5	*
El Cajon	103,740	<5	*	<5	*	<5	*
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	6	13.58	<5	*	6	13.58
Harbison Crest	65,725	<5	*	<5	*	<5	*
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	6	16.68	<5	*	8	22.24
San Dieguito	90,068	<5	*	<5	*	<5	*
Carlsbad	106,263	6	5.65	<5	*	6	5.65
Oceanside	182,869	11	6.02	<5	*	12	6.56
Pendleton	44,282	<5	*	<5	*	<5	*
Escondido	176,448	7	3.97	<5	*	8	4.53
San Marcos	87,848	<5	*	<5	*	<5	*
Vista	116,393	6	5.15	<5	*	6	5.15
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	12	292.97	<5	*	15	366.21
Fallbrook	53,294	8	15.01	<5	*	8	15.01
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	7	82.25	<5	*	9	105.75
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	269		5		274	
Total	3,224,432	537	16.65	29	0.90	566	17.55

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.3: Pedalcycle Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	67	37.73	<5	*	67	37.73
Peninsula	48,113	14	29.10	<5	*	15	31.18
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	<5	*	<5	*	<5	*
Southeast San Diego	161,320	7	4.34	<5	*	7	4.34
Mid-City	171,490	14	8.16	<5	*	15	8.75
Kearny Mesa	178,974	17	9.50	<5	*	18	10.06
Coastal	94,187	36	38.22	<5	*	36	38.22
University	51,220	6	11.71	<5	*	6	11.71
Del Mar-Mira Mesa	143,024	8	5.59	<5	*	8	5.59
North San Diego	148,211	6	4.05	<5	*	6	4.05
Poway	87,049	<5	*	<5	*	<5	*
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	<5	*	<5	*	<5	*
Sweetwater	95,382	<5	*	<5	*	<5	*
Chula Vista	156,517	15	9.58	<5	*	15	9.58
South Bay	141,049	<5	*	<5	*	<5	*
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	5	8.03	<5	*	5	8.03
Lemon Grove	26,131	<5	*	<5	*	<5	*
La Mesa	72,034	<5	*	<5	*	<5	*
El Cajon	103,740	<5	*	<5	*	<5	*
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	<5	*	<5	*	<5	*
Harbison Crest	65,725	<5	*	<5	*	<5	*
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	<5	*	<5	*	<5	*
San Dieguito	90,068	10	11.10	<5	*	10	11.10
Carlsbad	106,263	<5	*	<5	*	6	5.65
Oceanside	182,869	9	4.92	<5	*	12	6.56
Pendleton	44,282	<5	*	<5	*	<5	*
Escondido	176,448	<5	*	<5	*	<5	*
San Marcos	87,848	5	5.69	<5	*	5	5.69
Vista	116,393	6	5.15	<5	*	6	5.15
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	<5	*	<5	*	<5	*
Fallbrook	53,294	<5	*	<5	*	<5	*
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	<5	*	<5	*	<5	*
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	224		<5		227	
Total	3,224,432	494	15.32	16	0.50	510	15.82

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.4: Pedesrian Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	49	27.59	9	5.07	58	32.66
Peninsula	48,113	8	16.63	<5	*	8	16.63
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	15	25.97	<5	*	18	31.17
Southeast San Diego	161,320	17	10.54	<5	*	21	13.02
Mid-City	171,490	23	13.41	<5	*	23	13.41
Kearny Mesa	178,974	15	8.38	<5	*	18	10.06
Coastal	94,187	28	29.73	<5	*	28	29.73
University	51,220	<5	*	<5	*	<5	*
Del Mar-Mira Mesa	143,024	8	5.59	<5	*	10	6.99
North San Diego	148,211	<5	*	<5	*	5	3.37
Poway	87,049	<5	*	<5	*	<5	*
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	<5	*	<5	*	<5	*
Sweetwater	95,382	<5	*	<5	*	<5	*
Chula Vista	156,517	22	14.06	<5	*	26	16.61
South Bay	141,049	12	8.51	<5	*	13	9.22
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	<5	*	<5	*	<5	*
Lemon Grove	26,131	<5	*	<5	*	<5	*
La Mesa	72,034	<5	*	<5	*	<5	*
El Cajon	103,740	<5	*	5	4.82	6	5.78
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	<5	*	<5	*	<5	*
Harbison Crest	65,725	<5	*	<5	*	5	7.61
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	<5	*	<5	*	<5	*
San Dieguito	90,068	<5	*	<5	*	<5	*
Carlsbad	106,263	<5	*	<5	*	5	4.71
Oceanside	182,869	10	5.47	<5	*	13	7.11
Pendleton	44,282	5	11.29	<5	*	5	11.29
Escondido	176,448	6	3.40	5	2.83	11	6.23
San Marcos	87,848	<5	*	<5	*	<5	*
Vista	116,393	7	6.01	<5	*	11	9.45
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	<5	*	<5	*	<5	*
Fallbrook	53,294	<5	*	<5	*	<5	*
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	<5	*	<5	*	<5	*
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	180		7		187	
Total	3,224,432	445	13.80	61	1.89	506	15.69

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.5: Assault Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	302	170.06	10	5.63	312	175.69
Peninsula	48,113	21	43.65	<5	*	21	43.65
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	38	65.80	<5	*	40	69.26
Southeast San Diego	161,320	79	48.97	<5	*	82	50.83
Mid-City	171,490	80	46.65	7	4.08	87	50.73
Kearny Mesa	178,974	24	13.41	<5	*	25	13.97
Coastal	94,187	50	53.09	<5	*	51	54.15
University	51,220	<5	*	<5	*	<5	*
Del Mar-Mira Mesa	143,024	11	7.69	<5	*	14	9.79
North San Diego	148,211	<5	*	<5	*	<5	*
Poway	87,049	<5	*	<5	*	<5	*
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	<5	*	<5	*	<5	*
Sweetwater	95,382	6	6.29	<5	*	7	7.34
Chula Vista	156,517	80	51.11	<5	*	82	52.39
South Bay	141,049	51	36.16	<5	*	54	38.28
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	16	25.69	<5	*	17	27.29
Lemon Grove	26,131	11	42.10	<5	*	12	45.92
La Mesa	72,034	5	6.94	<5	*	5	6.94
El Cajon	103,740	12	11.57	<5	*	13	12.53
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	<5	*	<5	*	<5	*
Harbison Crest	65,725	9	13.69	<5	*	9	13.69
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	<5	*	<5	*	<5	*
San Dieguito	90,068	5	5.55	<5	*	6	6.66
Carlsbad	106,263	8	7.53	<5	*	8	7.53
Oceanside	182,869	32	17.50	<5	*	36	19.69
Pendleton	44,282	<5	*	<5	*	<5	*
Escondido	176,448	16	9.07	<5	*	18	10.20
San Marcos	87,848	<5	*	<5	*	<5	*
Vista	116,393	19	16.32	<5	*	21	18.04
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	<5	*	<5	*	<5	*
Fallbrook	53,294	<5	*	<5	*	<5	*
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	<5	*	<5	*	<5	*
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	508		11		519	
Total	3,224,432	1411	43.76	63	1.95	1474	45.71

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.6: Self Inflicted Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	22	12.39	17	9.57	39	21.96
Peninsula	48,113	<5	*	<5	*	<5	*
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	<5	*	<5	*	<5	*
Southeast San Diego	161,320	5	3.10	8	4.96	13	8.06
Mid-City	171,490	6	3.50	8	4.66	14	8.16
Kearny Mesa	178,974	7	3.91	19	10.62	26	14.53
Coastal	94,187	<5	*	10	10.62	12	12.74
University	51,220	<5	*	<5	*	5	9.76
Del Mar-Mira Mesa	143,024	<5	*	<5	*	<5	*
North San Diego	148,211	<5	*	<5	*	5	3.37
Poway	87,049	<5	*	6	6.89	6	6.89
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	<5	*	5	5.92	7	8.29
Sweetwater	95,382	<5	*	<5	*	6	6.29
Chula Vista	156,517	6	3.83	5	3.19	11	7.03
South Bay	141,049	<5	*	6	4.25	10	7.09
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	6	9.63	<5	*	9	14.45
Lemon Grove	26,131	<5	*	<5	*	<5	*
La Mesa	72,034	<5	*	<5	*	5	6.94
El Cajon	103,740	<5	*	8	7.71	8	7.71
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	<5	*	7	15.84	9	20.37
Harbison Crest	65,725	<5	*	<5	*	5	7.61
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	<5	*	<5	*	<5	*
San Dieguito	90,068	<5	*	5	5.55	6	6.66
Carlsbad	106,263	<5	*	8	7.53	11	10.35
Oceanside	182,869	<5	*	12	6.56	16	8.75
Pendleton	44,282	<5	*	<5	*	<5	*
Escondido	176,448	7	3.97	7	3.97	14	7.93
San Marcos	87,848	<5	*	<5	*	<5	*
Vista	116,393	<5	*	<5	*	6	5.15
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	<5	*	<5	*	<5	*
Fallbrook	53,294	<5	*	<5	*	6	11.26
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	<5	*	<5	*	<5	*
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	37		<5		41	
Total	3,224,432	138	4.28	189	5.86	327	10.14

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.7: Fall Related Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	509	286.62	16	9.01	525	295.63
Peninsula	48,113	63	130.94	<5	*	67	139.26
Coronado	23,916	29	121.26	<5	*	32	133.80
National City	57,755	63	109.08	11	19.05	74	128.13
Southeast San Diego	161,320	98	60.75	8	4.96	106	65.71
Mid-City	171,490	155	90.38	13	7.58	168	97.96
Kearny Mesa	178,974	163	91.07	17	9.50	180	100.57
Coastal	94,187	135	143.33	17	18.05	152	161.38
University	51,220	39	76.14	<5	*	43	83.95
Del Mar-Mira Mesa	143,024	57	39.85	8	5.59	65	45.45
North San Diego	148,211	51	34.41	17	11.47	68	45.88
Poway	87,049	26	29.87	6	6.89	32	36.76
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	67	79.34	13	15.39	80	94.73
Sweetwater	95,382	63	66.05	8	8.39	71	74.44
Chula Vista	156,517	203	129.70	21	13.42	224	143.12
South Bay	141,049	104	73.73	5	3.54	109	77.28
Jamul	17,995	14	77.80	<5	*	14	77.80
Spring Valley	62,290	43	69.03	9	14.45	52	83.48
Lemon Grove	26,131	24	91.84	<5	*	26	99.50
La Mesa	72,034	52	72.19	16	22.21	68	94.40
El Cajon	103,740	54	52.05	11	10.60	65	62.66
Santee	57,905	29	50.08	7	12.09	36	62.17
Lakeside	44,185	42	95.05	9	20.37	51	115.42
Harbison Crest	65,725	38	57.82	8	12.17	46	69.99
Alpine	17,729	7	39.48	<5	*	9	50.76
Ramona	35,966	11	30.58	<5	*	11	30.58
San Dieguito	90,068	61	67.73	17	18.87	78	86.60
Carlsbad	106,263	61	57.40	17	16.00	78	73.40
Oceanside	182,869	57	31.17	23	12.58	80	43.75
Pendleton	44,282	10	22.58	<5	*	10	22.58
Escondido	176,448	62	35.14	25	14.17	87	49.31
San Marcos	87,848	34	38.70	9	10.24	43	48.95
Vista	116,393	41	35.23	5	4.30	46	39.52
Valley Center	16,209	9	55.52	<5	*	12	74.03
Pauma	4,096	<5	*	<5	*	<5	*
Fallbrook	53,294	21	39.40	10	18.76	31	58.17
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	8	104.32	<5	*	9	117.36
Anza-Borrego Springs	8,511	<5	*	<5	*	<5	*
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	933		50		983	
Total	3,224,432	3442	106.75	398	12.34	3840	119.09

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table B.8: Sports/Recreation Injuries and Deaths by San Diego County Subregional Area, 2010

SRA	Population	Injury		Death		Total	
		Number	Rate	Number	Rate	Number	Rate
Central San Diego	177,589	31	17.46	<5	*	32	18.02
Peninsula	48,113	6	12.47	<5	*	7	14.55
Coronado	23,916	<5	*	<5	*	<5	*
National City	57,755	5	8.66	<5	*	5	8.66
Southeast San Diego	161,320	<5	*	<5	*	<5	*
Mid-City	171,490	6	3.50	<5	*	6	3.50
Kearny Mesa	178,974	5	2.79	<5	*	5	2.79
Coastal	94,187	25	26.54	<5	*	27	28.67
University	51,220	<5	*	<5	*	<5	*
Del Mar-Mira Mesa	143,024	6	4.20	<5	*	6	4.20
North San Diego	148,211	5	3.37	<5	*	5	3.37
Poway	87,049	<5	*	<5	*	<5	*
Miramar	304	<5	*	<5	*	<5	*
Elliott-Navajo	84,452	<5	*	<5	*	<5	*
Sweetwater	95,382	9	9.44	<5	*	9	9.44
Chula Vista	156,517	7	4.47	<5	*	7	4.47
South Bay	141,049	11	7.80	<5	*	11	7.80
Jamul	17,995	<5	*	<5	*	<5	*
Spring Valley	62,290	<5	*	<5	*	<5	*
Lemon Grove	26,131	<5	*	<5	*	<5	*
La Mesa	72,034	<5	*	<5	*	<5	*
El Cajon	103,740	7	6.75	<5	*	7	6.75
Santee	57,905	<5	*	<5	*	<5	*
Lakeside	44,185	5	11.32	<5	*	5	11.32
Harbison Crest	65,725	<5	*	<5	*	<5	*
Alpine	17,729	<5	*	<5	*	<5	*
Ramona	35,966	9	25.02	<5	*	9	25.02
San Dieguito	90,068	14	15.54	<5	*	14	15.54
Carlsbad	106,263	9	8.47	<5	*	9	8.47
Oceanside	182,869	13	7.11	<5	*	14	7.66
Pendleton	44,282	<5	*	<5	*	<5	*
Escondido	176,448	<5	*	<5	*	<5	*
San Marcos	87,848	6	6.83	<5	*	6	6.83
Vista	116,393	5	4.30	<5	*	6	5.15
Valley Center	16,209	<5	*	<5	*	<5	*
Pauma	4,096	35	854.49	<5	*	35	854.49
Fallbrook	53,294	5	9.38	<5	*	5	9.38
Palomar-Julian	3,566	<5	*	<5	*	<5	*
Laguna-Pine Valley	2,664	<5	*	<5	*	<5	*
Mountain Empire	7,669	<5	*	<5	*	<5	*
Anza-Borrego Springs	8,511	11	129.24	<5	*	14	164.49
Out of County	.	<5	*	<5	*	<5	*
Unknown	.	490		6		496	
Total	3,224,432	761	23.60	16	0.50	777	24.10

Source: County of San Diego. Health and Human Services, Division of Emergency Medical Services, San Diego County Trauma Registry and Medical Examiner's Data; 2010; Population Estimates, SANDAG

Table C.1: San Diego County Population Breakdown by Age Group, Gender and Race/Ethnicity 2010

		Males	Females	Total
Under 5	White	41,823	40,441	82,264
	Black	5,795	5,619	11,414
	Hispanic	51,759	50,917	102,676
	Asian/Other	17,891	16,898	34,789
5 to 9	White	39,708	38,730	78,438
	Black	5,684	5,365	11,049
	Hispanic	45,246	44,392	89,638
	Asian/Other	16,019	15,004	31,023
10 to 14	White	38,827	41,546	80,373
	Black	6,107	5,875	11,982
	Hispanic	35,908	35,737	71,645
	Asian/Other	17,674	16,461	34,135
15 to 19	White	49,029	46,979	96,008
	Black	7,826	7,006	14,832
	Hispanic	47,882	43,983	91,865
	Asian/Other	18,229	17,427	35,656
20 to 24	White	64,018	51,308	115,326
	Black	9,401	7,073	16,474
	Hispanic	50,017	42,609	92,626
	Asian/Other	20,809	19,276	40,085
25-34	White	96,217	85,293	181,510
	Black	13,032	11,324	24,356
	Hispanic	92,468	83,479	175,947
	Asian/Other	36,860	38,388	75,248
35-44	White	107,262	98,700	205,962
	Black	13,839	11,367	25,206
	Hispanic	72,484	76,703	149,187
	Asian/Other	33,806	38,114	71,920
45-54	White	131,331	128,633	259,964
	Black	13,099	11,907	25,006
	Hispanic	48,730	55,717	104,447
	Asian/Other	29,991	34,854	64,845
55-64	White	108,890	112,591	221,481
	Black	7,244	7,211	14,455
	Hispanic	25,810	30,946	56,756
	Asian/Other	21,354	25,886	47,240
65-74	White	59,545	66,388	125,933
	Black	3,538	3,901	7,439
	Hispanic	11,853	16,596	28,449
	Asian/Other	11,112	14,634	25,746
75-84	White	38,356	49,870	88,226
	Black	1,536	2,107	3,643
	Hispanic	6,964	10,231	17,195
	Asian/Other	6,558	10,330	16,888
85+	White	18,986	31,924	50,910
	Black	543	912	1,455
	Hispanic	2,677	4,170	6,847
	Asian/Other	2,311	3,562	5,873
Total		1,606,048	1,618,384	3,224,432

Source: San Diego Association of Governments (SANDAG)

DIRECTORY

EMS AGENCY

6255 Mission Gorge Road, San Diego, CA. 92120 - (619) 285-6429

Chief: Marcelyn Metz, RN

Medical Director: Bruce Haynes, MD

QA Specialist – Trauma: Les Gardina, MSN, RN, PHN, CEN

CHILDREN'S HOSPITAL AND HEALTH CENTER

3020 Childrens Way, San Diego, CA 92123 - (858) 576-1700

Hospital Administrator: Kathleen Sellick, CEO

Trauma Administrator: Irvin Kaufman, MD

Trauma Medical Director: Mary Hilfiger, PhD, MD, FACS

Trauma Nurse Coordinator: Sue Cox, RN, MS

SCRIPPS MERCY HOSPITAL

4077 Fifth Avenue, San Diego, CA 92103 - (619) 294-8111

Hospital Administrator: Tom Gammiere

Associate Administrator: Leanne Hunstock, RN

Trauma Medical Director: Michael J. Sise, MD, FACS

Trauma Nurse Coordinator: Dorothy M. Kelley, MSN, RN, CEN

Base Hospital Medical Director: Steven Zahler, MD, FACEP

Base Hospital Nurse Coordinator: Darlene Bourdon, RN.

PALOMAR MEDICAL CENTER

555 East Valley Parkway, Escondido, CA 92025- (760) 739-3000

Hospital Administrator: Gerald Bracht

Trauma Administrator: Kim Colonnelli, RN, MA

Trauma Medical Director: Tom Velky, MD, FACS

Trauma Nurse Coordinator: Peggy Sale, RN, MSN, CEN

Base Hospital Medical Director: Michelle Grad, MD

Base Hospital Nurse Coordinator: Cheryl Graydon, RN, MICN

SCRIPPS MEMORIAL HOSPITAL, LA JOLLA

9888 Genesee Avenue, La Jolla, CA 92037 - (858) 457-4123

Hospital Administrator: Gary Fybel

Trauma Administrator: Michael Sykes, RN

Trauma Medical Director: Fred Simon, MD, FACS

Trauma Nurse Coordinator: Cheryl Wooten, MSN, RN, CNS

Base Hospital Medical Director: Lisa Morikado, MD

Base Hospital Nurse Coordinator: Linda Broyles, MSN, RN, MICN

SHARP MEMORIAL HOSPITAL

7901 Frost Street, San Diego, CA 92123 - (858) 541-3400

Hospital Administrator: Daniel Gross, RN, CEO

Trauma Administrator: Janie Kramer, RN, Vice President

Trauma Medical Director: Frank Kennedy, MD, FACS

Trauma Nurse Coordinator: Kathi Ayers, RN, MSN

Base Hospital Medical Director: Mark Kramer, MD

Base Hospital Nurse Coordinator: Linda Rosenberg, RN

UNIVERSITY OF CALIFORNIA, SAN DIEGO MEDICAL CENTER

200 West Arbor Drive, San Diego, CA 92103 - (619) 543-6222

Hospital Administrator: Richard J. Liekweg, CEO

Trauma Administrator: Thomas Hamelin, RN

Trauma Medical Director: Raul Coimbra, MD, PhD, FACS

Trauma Nurse Coordinator (Interim): Patricia Stout, RN

Base Hospital Medical Director: Dan Davis, MD

Base Hospital Nurse Coordinator: Melody Dotson, RN, MICN

SHARP / GROSSMONT HOSPITAL

5555 Grossmont Center Drive, La Mesa, CA 91942 - (619) 465-0711

Hospital Administrator: Michele Tarbet, CEO

Base Hospital Medical Director: William Linnick, MD

Base Hospital Nurse Coordinator: Mary Meadows-Pitt, RN, BSN, MICN

TRI-CITY MEDICAL CENTER

4002 Vista Way, Oceanside, CA 92056 - (760) 724-8411

Hospital Administrator: Arthur Gonzalez

Base Hospital Medical Director: Judd Glasser, MD

Base Hospital Nurse Coordinator: Karen Majerczak, RN, CRNI